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Japanese National Railways Privatization Study

The Experience of Japan
and Lessons for Developing
Countries

Koichiro Fukui



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The World Bank
Washington, D.C.

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and Development/THE WORLD BANK
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Washington, D.C. 20433, U.S.A.

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First printing August 1992

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ISSN: 0259-210X

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Library of Congress Cataloging-in-Publication Data

Fukui, Koichiro, 1947-

Japanese National Railways privatization study : the experience of
Japan and lessons for developing countries / Koichiro Fukui.

p. cm. — (World Bank discussion papers ; 172)

ISBN 0-8213-2201-X

1. Nihon Kokuyu Tetsudo. 2. Railroads—Government ownership—
Japan. 3. Railroads and state—Japan. 4. Privatization—Japan.

I. Title. II. Series.

HE3360.N5F88 1992

385'.068—dc20

92-27952

CIP

FOREWORD

Five years have passed since the privatization process of the railway sector in Japan was initiated in 1987. This study is the first comprehensive analysis of this restructuring, showing how a formerly state-owned enterprise such as the railways can be successfully revitalized through privatization.

Over the past two decades in both developed and developing countries, the railway sector has experienced tough competition with different, increasingly sophisticated modes of transportation. In addition, national railways tend to have redundant work force which is politically hard to reduce. Resultingly, old fashioned state-operated railway systems are almost universally losing money and receiving subsidies. Many countries are now seeking to revitalize their railway systems through various forms of privatization chiefly to improve quality of service and efficiency, and reduce costs. Successfully restructured, a railway sector can provide an energy-efficient and environmentally-friendly mode of transportation which will be serviceable well into the next century.

The successful results of the Japanese privatization process are already clear. Fiscal drain has been almost entirely eliminated without raising fares. The quality of service has been greatly improved with substantially reduced number of employees and the demand for railway service continues to increase. On the other hand, still remain longer term problems such as the sales of shares to private investors and the repayment of old debts which are gigantic.

This report gives the evidence on how difficult, time consuming and politically complicated, but worthwhile, it is to rectify the fiscal drain, to enhance the morale of the employees, and most importantly, to offer a better service to the users with less costs. It is hoped that this study will make valuable information on privatization of railway sectors available to a broad readership, particularly in developing countries looking to transform their state-owned corporations to private companies. Japan's privatization experience can provide valuable lessons to development communities, private entrepreneurs and government officials who anticipate privatizing their own railway sectors.

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Acknowledgements

The author expresses special thanks to the Japan Economic Research Institute (Messrs Nagaharu Mitsuta, Shigeaki Wakabayashi, Tsutomu Shibata, Minoru Owada, Tsutomu Ozaki, Hiromitsu Takemi, Akira Ogasawara, Masahiko Ishida, Shigeru Kihara, Shuji Watanabe, and Toshiaki Takizawa) who assisted in the completion of this study. This study was initiated to complement the World Bank Paper entitled "Privatization: The Lessons of Experience" prepared by Bank Country Economics Department (CEC), and was partly incorporated into the Paper, but also has been completed as an independent study. The author expresses the appreciation for the insightful advice of the Bank Public Sector Management and Private Sector Development Division (CECPS) staff (Messrs/Mmes John Nellis, Sunita Kikeri, Ahmed Galal, and Charles Thomas) and the generous support of the Bank Cofinancing and Financial Advisory Services (CFS) staff.

INTRODUCTORY NOTE

This study should be read by everyone involved in trying to change large public institutions. The normal superlatives understate the scale of the problem of reducing the annual US\$ 18 billion fiscal burden of the Japanese National Railways (JNR), reshaping the institution so its focus would be on the customer's needs rather than the Government's ability to pay, and cleaning up the aftermath of a massive US\$ 286 billion financial train wreck. With 400,000 employees, and with five previous restructuring failures on record, reform of JNR was a vital, but seemingly impossible task. Successful change did occur, though, and there are lessons of considerable value to the World Bank and its members from the Japanese experience. Most of these are discussed broadly in the body of the report, or in the summary. It may be also worthwhile to discuss, at least briefly, the different ways in which the experience might be of interest to the Regions in which the Bank works.

First, the successful effort to make the railway market-driven will be particularly important for the restructuring, formerly planned economies of Central and Eastern Europe (CEE). Only in the CEE and CIS countries does the present scale of railway operations and of government financial involvement approach that of Japan before the JNR privatization. In effect, the Japanese Government took a huge, monolithic, production-driven railway entity and reshaped it into a series of smaller enterprises, each of which has a rather specific market on which it depends for survival. In the process, many of the effects of past policies, especially redundant labor, were resolved in ways which were acceptable to all. In particular, establishment of the Settlements Corporation, permitted an immediate separation and reorganization of ongoing railway operations completely apart from the disposition of an enormously complex set of old debt and surplus assets which will undoubtedly take years to work out. This, it seems to me, is a fair statement of the challenge in the CEE and CIS countries.

Although probably over a longer time frame, the same issue will also emerge in China and India as their economies evolve toward market systems. In both countries the railway ministry currently occupies a commanding position in the transportation system, and both will need to consider changes in the railway organization and objectives as the transportation network develops and competition grows. On a less massive scale, railways in the other Asian countries may be interested in the way in which the Japanese created multiple institutions to serve diverse needs. In particular, the separation of freight and passenger into different enterprises offered the opportunity to gain a better measure of the performance of each, and permitted freight to assume an independent, rather than a "little brother", status.

Latin America countries, by contrast, are vigorously exploring a broader role for the private sector in their railways; either through award of competitive concessions and management contracts as in Argentina, or through greater use of the private sector to provide services or to function in joint ventures with the railway. Although it seems more accurate to describe the JNR program to date as a "process leading to privatization," the progress thus far certainly gives credibility to those who argue that privatization can be made to work, and that it can lead to creation of profit-driven enterprises rather than bureaucratic governmental ministries -- a change which is critically important when all of the auto, bus, air and truck competitors are already operating in the private sector as they generally are in Latin America. Latin American countries also face a large issue of labor redundancy which the JNR program was able to handle through a judicious balance of reassignment, retraining and compensation.

Though the scale of the issues is entirely different, many of the issues in Japan are surprisingly similar to those faced in Africa. There is a need for good long range plans so that all parties involved have a clear and common understanding of the steps to be taken. The use of the Committee on Administrative Reform provided an open forum for discussion of options, an initiative which increased argument in the short run, but greatly reduced conflict in the longer run. And, although great emphasis was placed on consensus in the Japanese planning, authority and responsibility for program implementation were very effectively delegated -- an area where restructuring in Africa sometimes encounters difficulties.

Overall, despite the enormous scope of the program to restructure JNR, the underlying principles were quite simple: make the enterprise respond to the needs of the markets and get rid of services which are not economically justified; identify those interests which are adversely affected, and help them to adjust; reshape the railway monolith into smaller, more focused and flexible entities; and, isolate and deal separately with the problems created by past mistakes (uneconomic services, artificially low rates, redundant labor and excessive debt) as opposed to the initiatives needed to create enterprises which will be viable in the future. In these principles, there are lessons for all railways, developed and developing.

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EXECUTIVE SUMMARY

Background and Brief Description of JNR Privatization

By the latter half the 1970s, government finance in Japan had reached a crisis. The financial structure was inflexible and could not adapt to the necessity of reducing expenditures. In particular, the deficits generated by the Japanese National Railways (JNR), the Foodstuff Control Special Account, and the National Health Insurance System posed critical financial problems for the Government. The Provisional Committee on Administrative Reform was created in March 1981 to address these problems and was charged with devising the drastic measures necessary to achieve fiscal reform without raising taxes. In 1982 the Committee proposed the privatization of the three largest public corporations - JNR, Japan Monopoly Corporation (tobacco and salt), and Nippon Telegraph and Telephone Public Corporation. The Committee instituted requirements for the review of all projects requiring administrative approval and government funding, and mandated private sector participation in all large urban development projects.

Of all the Provisional Committee's tasks, by far the largest in scale and most critical was the privatization of JNR, Japan's largest public corporation. In 1980, JNR employed nearly 414,000 workers and its huge annual losses were increasing yearly. The Provisional Committee concluded that restoring JNR's financial health was impossible as long as it was operated as a centralized, nationwide public corporation. The Provisional Committee recommended to establish the Supervisory Committee for JNR Reconstruction to formulate and implement concrete policies for the corporation's reorganization. In 1987, JNR was broken up into six regionally based railroad passenger companies and a seventh company to handle freight transportation for the entire country (referred to as the JR's in this paper). The major portion of JNR's debt which had reached \$286 billion by the end of 1986, was reassigned to the JNR Settlement Corporation along with any surplus real estate of JNR and the shares of the newly created JR's. To date, all of the JR's shares are still owned by the JNR Settlement Corporation, but the Government plans to sell them to private investors beginning in 1992.

History of the Market Structure and Performance of JNR

In 1980, Japan had approximately 27,000 kilometers of rail lines which were operated jointly by JNR and more than a hundred private railway companies. With control of 80% of the total number of rail lines throughout Japan, JNR was by far the largest nationwide operator. The private railway lines operated throughout Japan, but the largest ones are concentrated in the three metropolitan areas of Tokyo, Osaka and Nagoya. JNR was in direct competition for the commuter market with the private lines operating in these areas.

JNR had enjoyed monopoly status until the 1950s. Gradually, however, competition from automobiles, aircraft and coastal shipping intensified and JNR lost its competitive edge in all geographic regions except the metropolitan areas and the bullet train networks. But even in the metropolitan areas, repeated fare hikes in JNR's final years as a public corporation resulted in fares that were higher than those charged by the private rail lines. JNR's share in passenger transport volume dropped sharply from 55% in 1955 to 23% in 1985. The share of freight transport volume dropped more drastically from 52% to 5% over this same period. Meanwhile, JNR's investments in infrastructure only increased its debt load. Road transport, on the other hand, benefitted from financial resources gleaned primarily from the gasoline tax.

JNR could not compete with the other modes of transportation which were being introduced during this period. After 1964, the year when JNR posted its first single-year loss of \$230 million, reconstruction plans were formulated, abandoned and then replaced by new plans. These attempts at reform by JNR management all ended in failure due to mistaken assumptions, lack of sensitivity to the changing transportation environment, and delays of approval by the Diet.

In the 1970s, JNR's management introduced a large-scale productivity improvement drive for their work force, but the largest labor union within JNR claimed the drive to be an unfair labor practice designed to undermine the union. Some of the claims were upheld by a government arbitration agency, and the mass media supported the union by criticizing the drive. The productivity improvement drive ended in total defeat for management, resulting in a negligible reduction in the work force and an unprecedented deterioration of employee discipline.

Performance continued to decline throughout the 1970s and early 1980s. In 1985, JNR's annual loss before subsidies approached \$18 billion. The causes of the deficit were: 1) abnormally high personnel expenses (amounting to 78% of total revenues at their peak, compared with about 40% for private railways) and 2) the burden resulting from excessive capital investment and interest accruing on the large volume of debt. JNR's consistent policy was to continue to cover its deficits by borrowing and, as a result, its total debt continued to snowball.

In spite of its financially disastrous situation, JNR continued to maintain superb railway engineering and operating techniques, owing to its history of recruiting officers and engineers of high caliber and morale. JNR's management remained confident that it was the only group that would both run JNR and reorganize it. It was opposed until the last moment to the Government's break up and privatization of the corporation. The largest labor union within JNR which was socialist-led, also considered its role as part of a political struggle and was actively opposed to the privatization movement. But all too frequent strikes along with scathing attacks from the press turned the public against JNR by 1980, leaving the general impression that the restructuring was essential. Because of these circumstances, the implementation of the privatization process included the dismissal of most of the JNR management and the intransigent union leaders (this union subsequently collapsed), a rather drastic case in Japan. The other minority labor unions within JNR chose to cooperate with the privatization process.

Reasons for JNR's Managerial Failure before Restructuring for Privatization

JNR's managerial failures prior to privatization can be attributed to a number of causes, classified into the three categories below.

(a) Problems inherent in the public corporation system such as:

Control of the Government and intervention of outsiders. In return for JNR's monopoly status as a public corporation providing a key public service, it was subject to strict governmental and congressional supervision and control. For example, the approval of the Minister of Transport was required in order to construct a new line and the JNR budget had to be approved by the Diet. As a result, outsiders, including politicians and the Government, often interfered in its management and forced JNR to invest in unprofitable routes.

Lack of incentive for efficient management. JNR management made little effort to maximize profits by decreasing costs and raising productivity. This behavior can be

attributed to 1) a lack of managerial discretion, itself the result of considerable outside interference, and 2) the absence of profit-motivation under the public corporation system.

Slow reaction to intensified competition. Public corporations generally function effectively in a monopolistic environment. However, as a result of a rapid increase in competitive modes of transportation such as automobiles and planes, the Japanese railway industry gradually lost its monopolistic position and market share. JNR management could not cope with this situation without having the power to take appropriate measures, such as the swift elimination of unprofitable lines.

Labour unions' lack of sense of crisis. Even after JNR began to run at a deficit, the labor unions refused to appreciate the scale of the crisis and continued to pursue political issues. They also refused to cooperate with management's efforts to rationalize and decrease costs. This attitude resulted in the disruption of work place discipline and the deterioration in the quality of services.

- (b) Size of JNR and insensitive reaction to local needs. This nationwide company was simply too large to be adequately managed by a single managerial entity. Those in the railway business must be sensitive to local demands and provide convenient services for their customers. Under unified, nationwide management, JNR was unable to provide locally-based service and consequently lost its competitive position vis-a-vis the private railways.
- (c) Lack of profit from related businesses. Given its public nature, the railway industry is regulated in determining its fares. Even private railways do not generally expect high profit levels. Indeed, related businesses such as real estate development account for a substantial proportion of the total profit of most companies. As a public corporation with specific objectives, JNR was limited with respect to its scope of business. Thus it could not rely on related businesses for profits, and failed to improve the profitability of the corporation as a whole.

Privatization Process of JNR

In July 1985, the Supervisory Committee submitted its written opinion concerning the restructuring of JNR to the Prime Minister. In April 1987, as the first and most important part of the privatization process, the corporatization and division of JNR were carried out virtually in line with the Supervisory Committee's report. The main results of these steps were:

- (a) The passenger railway division was divided into six companies: three on the main island of Honshu and one each on the three islands of Hokkaido, Shikoku, and Kyushu. A seventh firm handled freight for the entire country. The profitability of each new company was carefully measured and steps were taken to ensure that these companies maintained solid managerial bases. The three bigger Honshu-based companies and the freight company assumed only \$46 billion of JNR's total debt. The Shinkansen (Bullet train) Holding Corporation was established, which assumed \$43 billion of JNR debt. It leased bullet train networks to Honshu-based companies with the rental fees adjusted to correct the profit disparity between old and new bullet train networks. The smaller passenger companies in Hokkaido, Shikoku and Kyushu did not assume any of JNR debt. The Management Stabilizing Fund was created for these smaller passenger companies to offset the imbalance between revenues and expenditures. The JNR Settlement Corporation provided the capital for this Fund.

- (b) The remaining \$197 billion liabilities were assumed by the JNR Settlement Corporation, established as the successor to the old JNR. It also received the shares of the JRs and the surplus real estate of JNR as well as the redundant workers. The redemption of the debts assumed by the JNR Settlement Corporation was to be made as much as possible by the repayment of the Shinkansen Holding Corporation, sales of the marketable pieces of JNR-owned real estate, and sales of JR stock. The remainder debt is expected to be born by the general budget account.
- (c) JNR had around 200,000 redundant workers in 1980. By 1985, the number of JNR employees had already been reduced to 280,000 by prior restructuring from 414,000 in 1980. However, there were still an estimated 93,000 redundant workers. The Government actively promoted various measures to secure job changes for these workers. The public sector was asked to employ JNR workers without increasing total employees, and the private sector voluntarily accepted JNR workers. The elimination of the redundant work force largely by job-transitioning was carried out smoothly, aided in part by economic growth and by the very low unemployment rate of the latter 1980s. As a result, the number of JNR employees ultimately transferred to the JNR Settlement Corporation in April, 1987 was 23,660, most of whom found jobs in other places by April, 1990. A total of only 1,050 employees were ultimately dismissed because they refused to move to newly allotted placements.
- (d) In the new JRs, chairmen were chosen from among influential business leaders in the local business community. The first Presidents of the East and West Japan Company, the biggest two of the JR companies, were former high-ranking officials of the Ministry of Transport and had been supporters of privatization. The Presidents of the other JRs were selected from JNR management members who had not opposed privatization. Other leaders within JNR who had promoted privatization, though as a minority at the beginning, were appointed to influential management posts at the new JRs.

Since April 1987, the JRs have operated as commercialized stock companies, but all of the shares still have been owned by the JNR Settlement Corporation. As soon as the JRs meet the listing requirements of the Tokyo Stock Exchange, the shares of JRs are expected to be listed and sold to the public, and the transition to private enterprise will be completed. The Exchange requirements are:

- (a) Net assets must be twice as large as paid-in-capital.
- (b) Both current and pre-tax profits in the financial period immediately before listing must be more than 40% of paid-in-capital and more than 30% of paid-in-capital in the two preceding periods.
- (c) A dividend must have been paid in the immediately preceding period.
- (d) The company must have been in business continuously for at least five years.

On April 1st, 1992, all of the JRs celebrated their fifth anniversary, one of the above mentioned requirements. By this date, three of the JRs (East Japan, Central Japan, and West Japan) had also met all of the other requirements. The Government and the JNR Settlement Corporation's objective is to list these companies and to begin to sell shares starting FY 1992, completing the sale of all stocks within four to five years. The current profit of the freight company is still below but is nearing the required listing level and is expected to be listed in a few years. The remaining three island companies have poorer operational bases and have been profitable only due to the added revenue from the Management Stabilizing Fund. Among them, however, JR Shikoku has already met the profit standard. JR Kyushu and JR Hokkaido have

not yet met the profit standard. JR Hokkaido, the least profitable of the three, plans to pay out dividends of 10 % in March 1995 in preparation for the listing of its shares. Thus, these last three companies are also striving to achieve the earliest possible listing, but the time schedule is uncertain as yet.

Evaluation of JNR Restructuring for Privatization

The performance of JNR since restructuring has been remarkable, though it can be explained in part by the general economic growth which occurred in Japan during the same period when restructuring was carried out. The annual increase in passengers and cargo has been 5% and 10%, respectively since 1987. The number of employees has been drastically reduced to 191,000. As a result, transportation efficiency has remarkably improved.

The profitability of the new JRs has been improved due to the reduction of work force and liabilities. Transportation volume has been increased by JRs' efforts and favorable economic environment. The amount of annual profit improvement for the new JRs as a total is estimated to have reached \$21 billion in 1989 (excluding the contribution of the favorable economic environment). Of this improvement, \$10.6 billion in profits are estimated to be due to the efficiency gains resulting from restructuring.

Before restructuring, the annual subsidy from the Government to JNR reached \$4.9 billion on average. After restructuring, the annual subsidy to JRs has been drastically reduced. In 1990, for example, the subsidy to JRs was only \$48 million, and \$1.2 billion including the JNR Settlement Corporation. This year, profitable JRs paid \$1.2 billion in corporate tax to the Government. Labor-management relations have also improved. JRs are actively expanding their businesses to areas outside transportation as a result of deregulation, and the corporate image of the JRs has improved dramatically.

While the JRs have demonstrated better performance, the biggest beneficiaries of this restructuring are the Government which benefits from the reduction of the fiscal burden, and the rail passengers which benefit from the improvement in service quality without fare increases. Certain segments of the society such as equipment suppliers and other private railway companies face more competition by JRs' commercialization. Passengers in the separated remote lines pay higher fares in some cases. However, there have not been obvious losers except the former JNR management and radical union leaders, and the 1,050 employees who were dismissed in April 1990. The privatization process of JNR can be judged to have been successful, even though JRs' shares have not been sold to private investors yet and the JNR Settlement Corporation still has outstanding debts.

Remaining Issues

With the creation of the JRs, the first phase of the JNR privatization was completed. However, the following issues remain:

- (a) Debts of JNR Settlement Corporation. A major portion, or \$197 billion of JNR's debts were reassigned to the JNR Settlement Corporation along with the real estate and shares of the JRs. These debts are expected to be repaid by the sale of real estate and shares. However, the land sales have been carried out at a much slower pace than initially planned due to the Government's decision in October, 1987 to prohibit competitive bidding for the real estate of the JNR Settlement Corporation. The Government made its decision at the expense of and against the objective of the JNR Settlement Corporation, because it was thought that such bidding might push general land prices up further. Therefore, the sale of real estate has been limited. The sale of JR shares has not been carried out yet either. As a result, the proceeds from the sale of assets have not covered

interest payments. In fact, the debt outstanding had increased slightly to \$201.5 billion by the beginning of the FY1991. Land prices recently have shown signs of decline. Therefore, the Government has lifted the ban on competitive bidding and it is expected to resume in FY1992. The repayment of debt, the major remaining issue to be solved, must be carried out rapidly through the sale of shares and land, or by the maximization of profit through the development of the real estate.

- (b) Sales of JR's shares. As soon as the JRs meet the listing requirements of the Tokyo Stock Exchange, their shares are expected to be listed and sold. Three of the JRs (East Japan, Central Japan and West Japan) have already met the requirements and the sales of their shares is planned to begin FY1992. Currently, however the stock market in Japan is depressed and the sales may be postponed, depending on stock market conditions. For the three island companies, it is crucial for them to also meet the listing standards by strengthening their related businesses such as urban development.
- (c) Influence of the Government. Since the Government owns the stocks of the JRs, politicians and government officials are still able to exert considerable influence over them. For example, the appointment of JR's presidents is subject to approval by the Minister of Transport and is influenced by the Government. When the JRs' shares are transferred to the public, the existing laws concerning JRs will be amended (or abolished) and the control of the Government will be minimized to the extent of other private railways companies, which is basically the approval of fares. However, if the sales of shares is delayed due to the continued depressed stock market in Japan, there remains the room for the intervention of outside entities, which has been proven in the past to be detrimental to efficient management.

Suggestions from Lessons of JNR Privatization

It would not be appropriate to generalize Japan's experience of privatization and directly apply it to other countries. Japan's experience is, in part, attributable to the unique economic and social environment in Japan at the time. However, the really important lessons of the JNR privatization experience can be applied to the conditions of developing countries, making allowance for the individual circumstances of each country. Developing countries considering the privatization of their "SOE"s should keep the following ten points in mind.

1. Importance of careful planning. The privatization of JNR was not carried out hastily. The planning process alone required six years, while the implementation stage, including the selling of JR's stock, required an additional five years. During this period, the issues of privatization were widely debated, various measures were canvassed, and implementation was ultimately carried out with great care.
2. Divide short and long term problems. Increasing fiscal drain had to be stopped as soon as possible. However, considering its huge debts and operating losses, a massive redundant work force, and some confrontational labor-management relations, it would have been difficult to solve all of JNR's problems simultaneously. After considerable deliberation, a two-phase method was adopted. During the first phase, the establishment of the viable JRs through the division and the corporatization of JNR was implemented. During the second phase, longer term issues such as the elimination of debts, the streamlining of the redundant work force, and the sales of shares and surplus real estate were planned to be carried out.

3. The value of an "impartial" planning or guidance committee. When politics is involved or when a fresh outlook is important (or both), the use of an impartial committee of experts can be important. The JNR privatization probably could not have gained full consensus (or had the power to undercut the opposition of JNR management) without the work of its outside committees which were chaired by respected experts.
4. Break up the monolith and treat each of the constituent parts on its own merits. The problems and solutions of JR East Japan are quite different than those of JR Shikoku, but this was never clear under the overall JNR umbrella. By breaking up the JNR monolith, the JRs were able to find more appropriate solutions for each issue. Also, as suggested above, the JRs acting as individual entities made each of their conditions much more closely aligned with, and able to serve, its particular market.
5. Making the institutions fit the market. One example is the creation of a freight company which cares about freight and is not overwhelmed by passenger issues. It is also vital, though, to realize that 95 percent (or so) of all passengers are carried within each of the individual passenger carriers (i.e., passenger companies have a rather precise focus on their particular market). East Japan, for example, is highly focussed on conventional, especially suburban, traffic. Central Japan lives or dies by Shinkansen.
6. Get the incentives right for efficient management. Unlike the old JNR, each of the new companies (even the "stabilized" island companies) has an incentive to maximize revenues and minimize costs. The practice of incessant political interference in operations has met a very effective barrier: the new managements can not afford to absorb the costs associated with excess labor or uneconomic services. However simple this may seem, this is at the heart of a radical change in the corporate mentality of the railways.
7. Leave the sins of the past in the past. It was important that the responsibility for the debt burden be properly apportioned so as not to sink any of the new companies. Therefore, it was deemed better to be conservative in estimating each company's viable debt burden. Because many of JNR's problems were the children of misbegotten governmental policies, it seemed appropriate that the new companies should not have to carry a disproportionate share of the JNR liabilities.
8. Attack problems and institutions, not people. Except for a few exceptions involving specific executives and union leaders, the public's anger was directed at the institution of JNR and not at individuals. JNR's personnel problem was that it was almost wholly lacking in commercial attitudes. Its strength was in really superb engineering and operating techniques. The transition was handled in a way that did not diminish its technical strength, but also permitted the JR's to acquire and use commercial skills as well.
9. Make every effort to identify and compensate the losers. With very few exceptions (maybe radical union leaders and old style JNR managers), adverse impacts of the change, especially to those who left JNR, were identified early and compensated. There were very few points at which anyone could be said to have been treated unfairly.
10. Having the right people in the right places matters. With the old JNR management and labour union leaders remaining in the posts, the privatization process could not have been carried out successfully. Prime Minister Nakasone also understood that he had to replace those who could not support his policies. This type of restructuring could easily fail (or almost fail), if opponents to a new system are left in positions of power.

I. PRIVATIZATION IN JAPAN IN THE 1980s

A. General Background

1.1 By the latter half of the 1970s, government finance in Japan had reached a crisis. In order to respond to this crisis, in 1975 the Government began issuing special bonds (so-called deficit bonds) to help cover administrative expenditures. These bonds were in addition to the construction bonds the Government was already issuing to cover investment expenditures. By 1979, bonds had been issued for a total of US\$438.5 billion (¥57 trillion)* and the Government's dependence on them had reached 39.6% of the Government's total budget. This level was extremely high compared with those of other leading Western countries, whose dependence ratios in 1979 ranged from 5.6% (United States) to 14.2% (West Germany).

1.2 Three factors contributed directly to this crisis:

- (a) First, prices and wages in Japan had increased dramatically in the wake of the oil crisis of 1973, resulting in greatly increased expenditures for social security, education, and other social service areas where Japan was just beginning to achieve parity with the advanced countries of the West.
- (b) Second, in 1974 Japan experienced negative economic growth for the first time since World War II. After 1976, in an effort to achieve a more stable level of growth, the Government greatly increased the number of public works projects undertaken.
- (c) Third, the slowdown in economic growth led to a reduction in tax revenues, which in turn led to increased government expenditures. In order to cover these expenditures, the Government had to issue more bonds. As a result, the Government was confronted with the increased burden of the repayment of the principal and interest on the bonds.

1.3 In addition to the economic and social changes which occurred after 1973, another factor contributing to the fiscal crisis was the inflated spending practices which had continued from the period of high economic growth. The country's financial structure was inflexible and consequently it was very difficult to reduce annual expenditures. In particular, the deficits generated by the Japanese National Railways (JNR), the Foodstuff Control Special Account, and the National Health Insurance System posed a real problem for government finances. Expenditures for these three items alone accounted for nearly 10% of the total budget.

1.4 In response to these problems, the Ministry of Finance presented a fiscal reform plan to the Diet in 1979, the stated goal of which was to "reduce the issuance of special government bonds to zero by 1984." In support of this plan, the Ohira Cabinet, composed of Liberal Democratic Party (LDP) members, tried to introduce a general consumption tax. But public opinion was strongly against such a tax. Complaints were voiced that the Government had not made sufficient efforts to streamline its own operations, particularly when compared to the efforts that the private sector had made in struggling to overcome the

* Hereafter, US\$ is abbreviated as \$. An exchange rate of \$1=¥130 is used.

inflation produced by the oil market. The public felt that there was considerable administrative waste and that reducing government expenditures should be made a priority. As a result, the LDP was roundly defeated at the next election in 1979.

1.5 Thus, public opinion made it difficult to rebuild government finances through large tax increases. However, in 1980 the LDP won the general election by a landslide, and the Suzuki Cabinet gained a stable majority in the Diet. In March 1981, the Provisional Committee on Administrative Reform (the Provisional Committee) was appointed under the Cabinet's jurisdiction and charged with devising the drastic measures necessary to achieve fiscal reform without raising taxes. The Provisional Committee was headed by Mr. Toshio Doko, honorary chairman of the Federation of Economic Organizations (Keidanren), who had a brilliant record of successfully rebuilding private enterprises (See P.49, Para. 3.47). The Committee also included experts from various fields including finance, government, and labor.

1.6 The Provisional Committee discussed how to achieve an effective, flexible administrative system that would be able to accommodate changes in social and economic conditions. In addition to recommending a radical reform of Japan's administrative system, the Committee proposed the privatization* of Japan's three largest public corporations--Japanese National Railways, Japan Monopoly Corporation (tobacco and salt) and Nippon Telegraph and Telephone Public Corporation. They also advised that private initiative be used to construct social infrastructure, which in the past had been supplied primarily through public works.

1.7 Based on these recommendations, the following steps were taken:

- a) All items that required administrative approval and government funding were reviewed;
- b) The three public corporations mentioned above were privatized;
- c) Large projects, such as the Tokyo Trans-Bay Highway and Kansai International Airport (in Osaka), were implemented through private initiative.

1.8 In addition to these steps, the tax system was reformed in 1988, and the consumption tax that had been proposed earlier was implemented. These actions, coupled with favorable economic conditions, made it possible for the Government to achieve its goal of discontinuing the issuance of special bonds by 1990, albeit six years later than originally planned. Thus 1980s were a transition period between the high-growth economy of the postwar years and the present, stable-growth economy. As such, it was also a period of reevaluation and reform of the Government's administrative, finance and tax systems.

B. Privatization of JNR--Brief Description

1.9 The chief component of Japan's fiscal reform was the privatization of JNR. Because JNR had fallen into virtual bankruptcy, the Provisional Committee concluded that

* For a more detailed explanation of the term "privatization" as used in this report, please refer to Paragraph 3.22, P. 38.

restoring it to financial health was impossible as long as it continued to be operated as a centralized, nationwide public corporation. Although the Provisional Committee's recommendation to divide and privatize JNR was strongly opposed by the railroad company, mass-media reports were supportive and public opinion ultimately swung in favor of the proposed reforms. In 1982, the Provisional Committee submitted a recommendation to establish a Supervisory Committee for JNR Reconstruction (Supervisory Committee), which was entrusted with studying the privatization and division of JNR and with formulating concrete implementation policies. In 1985, the Supervisory Committee recommended several concrete measures to be taken, and in 1987 those measures were implemented, bringing JNR's 115-year history to a close.

1.10 Repayment of debt and other matters associated with JNR are still being handled by the JNR Settlement Corporation, and the Government has not yet sold the shares it holds in the newly privatized railway corporations. Nevertheless, the operational restructuring of JNR can be judged to be a tremendous success, even viewed at this early stage.

II. JNR BEFORE RESTRUCTURING FOR PRIVATIZATION-HISTORY AND DEVELOPMENT OF CRISIS

A. History of JNR

A1. Ministry of Railways

2.1 Japan's first railway, which ran between Tokyo and Yokohama, was built by the Government in 1872. The railway authorities, realizing the significance that a railway has in the development of a modern state, were determined to build and run the railway as a state project.

2.2 At first, private companies were permitted to construct only regional railways. As proved to be the case, however, the Government could not fully finance the enormous investment required for railway construction, and private companies were permitted to take part in the construction of some of the trunk lines. To encourage private participation, the Government offered several incentives, including free use of government land, governmental acquisition of private land by proxy for private companies, grants-in-aid in order to pay interest on construction capital, and tax exemptions. In return, private companies were required to comply with governmental supervision, to cooperate with the military and the police, and to recognize that the Government reserved the option to purchase the railways at some future date. By 1889, the mileage of privately-run railway lines exceeded that of Government owned lines.

2.3 As a result of the Sino-Japanese War (1894) and the Russo-Japanese War (1904-1905), the Japanese military became convinced of the railway's strategic importance and lobbied strongly for the nationalization. This lobbying contributed to the passage of the Railways Nationalization Law in 1906. In accordance with this law, the Government purchased those privately constructed trunk lines that could be integrated into a nationwide network.

2.4 Private operators opposed nationalization for the reasons given below. It is interesting to note that these reasons are the same as those given 80 years later in support of the privatization of JNR.

- (a) Lax management of personnel and expenses in government-run operations results in inefficiency.
- (b) Excessive regulations make it difficult to run a large railway operation expeditiously.
- (c) Lack of competition results in the stagnation of operational improvements and development.
- (d) Investment in the construction and maintenance of new lines would increase financial burdens.
- (e) Large-scale enterprises are too complex for a single government bureau to administer.

2.5 After nationalization, the national railway system was managed by the Ministry of Railways, established in 1920. Because automobile transportation was still undeveloped, the state-owned railway had a virtual monopoly of land transportation in Japan.

A2. JNR as a Public Corporation

(Establishment of JNR as a Public Corporation)

2.6 With the end of World War II, democratization and the chaotic economic situation resulted in the radicalization of the labor movement. To counteract this, in 1948 the occupation forces prohibited public servants from striking and directed the Japanese Government to establish public corporations and to transfer employees working in such areas as railway operation--for whom the new restrictions seemed inappropriate--to these corporations. This was how the Japanese National Railway came to be established in 1949. Although JNR employees were given the right of collective bargaining, they were not allowed to strike. Furthermore, as it was under the strict control of the Government and the Diet, JNR as a corporate enterprise was given little discretion in managerial matters.

2.7 Despite these organizational changes, the Japanese people continued to regard JNR essentially as part of the Government for the following two reasons:

- (a) Japan had no previous experience with the concept of a public corporation, an organization that is managed like a private company and carries out public services efficiently.
- (b) JNR and other public corporations were created not by the Japanese Government's own initiative or out of necessity, but as part of a postwar occupation policy to counteract an increasingly radicalized labor movement.

(Discussion of Privatization after JNR was Established)

2.8 Soon after JNR was established as a public corporation, private railroad executives advocated two reforms: 1) the conversion of JNR into a private stock company; 2) the division of JNR into regional, privately-run companies. The reason given for these suggestions was that JNR's existing form as a single, nationwide public corporation would result in various financial problems. However, JNR was operating profitably at the time and thus the need for reform was scarcely recognized. Consequently, the argument for privatization did not receive any support.

(The Weakening of JNR)

2.9 During the first 10 years after the war, the railways maintained a dominant position in land transport in Japan. However, with the improved performance of automobiles and aircraft and the construction of new roads, airports, and harbors, the competitiveness of the railways declined. JNR's share in the transport market dropped dramatically in the 1960s, as shown in Figures II-3 and II-4 (Page 21 and 22), and JNR lost also its preeminent position in freight transport.

2.10 The construction of a greatly improved railroad transportation infrastructure, including improvements on the trunk line networks, was almost finished by the 1980s with the completion of the Shinkansen (Bullet Train) networks. Under these circumstances, it became less imperative for the Government to directly shoulder the burden of railway transport operation. At the same time, it became increasingly important to introduce the managerial practices of private enterprises.

B. Regulatory Framework

B1. Legal Framework and Corporate Structure

(Category of Corporation)

2.11 JNR was established in 1949 in accordance with the Japanese National Railways Law. According to Japan's legal system, JNR was a public corporation and therefore differed from the private companies that are subject to civil or commercial laws. In Japan, public corporations are defined as corporations whose objective is to carry out public-oriented operations through private-company means. Such corporations are supposed to be independent of the control of both the Government and private capital. In addition to JNR, the Japan Monopoly Corporation (tobacco and salt), and Nippon Telegraph and Telephone Public Corporation were considered public corporations.

2.12 In Japan, these three public corporations were established in order to run operations that had previously been run by the state, and were neither exclusively national nor private enterprises. Public corporations were distinguished by the following special characteristics not found in purely private corporations:

- (a) They were established on the basis of a special law.
- (b) They were charged with carrying out public-oriented operations in a manner consistent with that of private enterprises.
- (c) All aspects of their organization and operation, including the appointments of officials, budgets, and operation plans, were conducted under the supervision of the Government and the Diet.

(Objectives)

2.13 JNR was established in order to efficiently operate the railways, which had previously been run by the Government. In contrast to private stock companies, the pursuit of profit was not a main objective of the JNR. Likewise, in order to prevent JNR from squeezing out private operators by abusing its inherited monopoly in land transportation, its activities were strictly limited to those operations closely related to the railways.

(Capital)

2.14 The capital used to establish JNR was provided by the Government and was equivalent to the value of the assets in the Special Account for the Governmental Railways, which JNR took over from the Government.

(Governing Organs)

2.15 The decision-making organ of JNR was a Board of Directors consisting of a Governor, Deputy Governor, and Directors. Minor decisions were entrusted to the Governor, who served as Chairman of the Board and who executed his duties as the representative of JNR.

2.16 An auditing committee was established to track JNR's operations and to report its findings to the Governor. When necessary, the committee also advised to the Minister of Transport or the Board of Directors.

(Officers and Employees)

2.17 The Cabinet appointed the Governor who, in turn, appointed the Deputy Governor and Directors with the approval of the Minister of Transport. Members of the auditing committee were appointed by the Minister of Transport in order to guarantee the committee's independence.

2.18 Officers and employees were considered to be the public servants when criminal laws were applied.

2.19 The rights of employees to form unions and engage in collective bargaining were admitted. However, the right to strike was prohibited by law because JNR's virtual monopoly on land transport at that time meant that disruption of services during strikes would have had a profound social impact.

2.20 The postwar labor union movement in Japan was highly influenced by Marxism. The JNR union was a leading participant in this movement and set the restoration of the right to strike as their main goal.

(Accounts)

2.21 Because the JNR budget required Diet confirmation, the Minister of Transport submitted the budget for each fiscal year to the Diet at the same time that the Government budget was submitted. Fund Plans based on the budget had to be submitted to the administrative arm of the Government.

2.22 The settlement of financial accounts required the approval of the Minister of Transport and inspection by the government. Accounts were submitted to the Diet together with the Government's account settlements.

B2. Institutional Structure

(Sector of Operations)

2.23 As a result of the nationalization carried out in 1906, the Japanese Government had become the direct operator of the nation's network of main trunk lines, though with the enactment of the Local Railways Act in 1921, the private railways were permitted to operate local rail transportation. After the founding in 1949, one of the tasks given to the JNR was the implementation of a national transport policy. This policy emphasized the improvement of the network of trunk lines, and accordingly, JNR promoted the construction of the Shinkansen (Bullet Train) Network and other projects. Nevertheless, as the successor of the governmental railway, JNR also owned many smaller remote transportation routes that had been built as a result of political pressure following nationalization in 1906.

(Organization)

2.24 Except for a brief period immediately following JNR's establishment, employment peaked in 1966 with 470,000 employees, making the railroad the largest business enterprise in Japan. In addition to its head office, JNR operated administrative

departments, construction departments, factories, research facilities, schools, hospitals, and other institutions throughout Japan.

2.25 Decision-making on principal operational matters was carried out at JNR headquarters. The organization was divided by category of operation and, when necessary, by region. With the exception of a very small group that was slated someday to participate in top management, employees were customarily hired at the local level for fixed job categories and geographic regions. The result was an organization made up of numerous posts of duty scattered throughout the country and numerous employees in various job categories. This made it difficult for JNR to react quickly and appropriately when competition from other transportation entities increased.

2.26 In 1957, a system of regional branches was introduced in order to improve organizational effectiveness by decentralizing authority. Nevertheless, because the headquarters retained the power to decide all basic matters affecting revenue and expenses, the change did not make it possible for the regional offices to set fares and wages according to local demand for transport services and competitive conditions. Consequently, regional offices with weak operational bases performed poorly and the entire system was abolished in 1970. Years later, when privatization was being considered, this experience contributed to the realization that the break-up of JNR's centralized, nationwide organization was absolutely necessary.

B3. Regulations and Corporate Mandate

(Tariff System)

2.27 Given JNR's virtual monopoly over land transportation, fares were regarded as a kind of tax and it was thought that they should be set by law. The 1948 Japanese National Railways Fare Law set basic fare rates for passengers and freight, leaving other charges subject to approval by the Minister of Transport.

2.28 Because standards for deciding fare rates were ambiguous, Diet deliberations concerning fare increases often became the object of political maneuvering between the Government and the opposition parties, which resisted increases primarily on the grounds that they contributed to inflation. Thus fare increases were often delayed or reduced, creating financial pressures on JNR operations. To alleviate these difficulties, the law was amended in 1977, and it became possible to raise fares with the approval of the Minister of Transport and without going through the Diet.

2.29 Uniform fare rates throughout the country ensured that the burden for operating JNR was shared equally by all citizens. Uniform fare rates for both inefficient remote routes (which had fewer customers and higher costs) and metropolitan lines were made possible by a system of cross-subsidization. As a result of this system, profits made on the metropolitan lines were used to offset deficits incurred by the remote transportation routes. Fares charged by private railways vary, reflecting each company's costs. But in general, their rates in metropolitan areas are lower than those in outlying areas. As JNR made frequent increases to improve its financial condition, its fares became higher in metropolitan areas as compared to those of competing private companies. Eventually this practice was abandoned and when passenger fares were raised in 1984, the decision was made to vary the rates of increase by geographic region.

Table II-1 Comparison of Fare Rates

(As of April 1, 1986. Unit: \$/km, US\$1=¥130)

	JNR	Private Railways
Metropolitan Areas	0.09	0.06
Regional Areas	0.13	0.31

Source: Ministry of Transport

(Investment Program)

2.30 The construction of new lines was governed by the Railway Construction Act, enacted in 1922. Only two organizations were permitted to engage in the construction of JNR lines: JNR itself, and the Japan Railway Construction Public Corporation (JRCPC) founded to promote railway construction. JRCPC transferred or leased the lines it built to JNR or to the private railway companies.

2.31 For the construction of the Shinkansen (Bullet Train) lines, the Minister of Transport drew up plans and directed either JNR or JRCPC to build them. The construction of conventional lines by JNR required only the approval of the Minister of Transport. The Minister drew up the plans for lines built by the JRCPC and his approval was required when actual construction was ready to begin.

2.32 Principal JNR investments, such as those in railway construction, had to be determined by the budget, but investment in related businesses could be undertaken with the permission of the Minister of Transport.

2.33 Actual investment in facilities was implemented in accordance with policies prescribed in long-term plans, as outlined below.

2.34 During the period covering the first two plans, actual transport results exceeded the predictions used as the basis for determining facilities investment. Beginning with the Third Plan, however, JNR's lack of competitiveness became pronounced and actual results fell short of predictions. After FY1964, JNR operated at a deficit. The Third Plan was completed in 1968, and in 1969, JNR began the process of operational reconstruction. Although at this stage JNR should have curtailed capital investment, it continued investment at a high level. Investment levels did not begin to decline until 1982, when it became clear that JNR was bankrupt.

Table II-2 Plans for JNR Investment in Facilities

(US\$ millions) (US\$1=¥130)

Name of Plan	Period (FY)	Monetary Amount (Yearly Average)	Primary Objective
First Plan	1957~60	3,140 (785)	Renovation of old equipment, double-tracking, and electrifying of trunk lines
Second Plan	1961~64	7,306 (1,827)	Increasing transport capacity, construction of Tokaido Shinkansen (Bullet Train)
Third Plan	1965~68	10,923 (2,731)	Increasing commuter transport
First Through Fifth Reconstruction Planning Periods	1969~85	98,680 (5,805)	

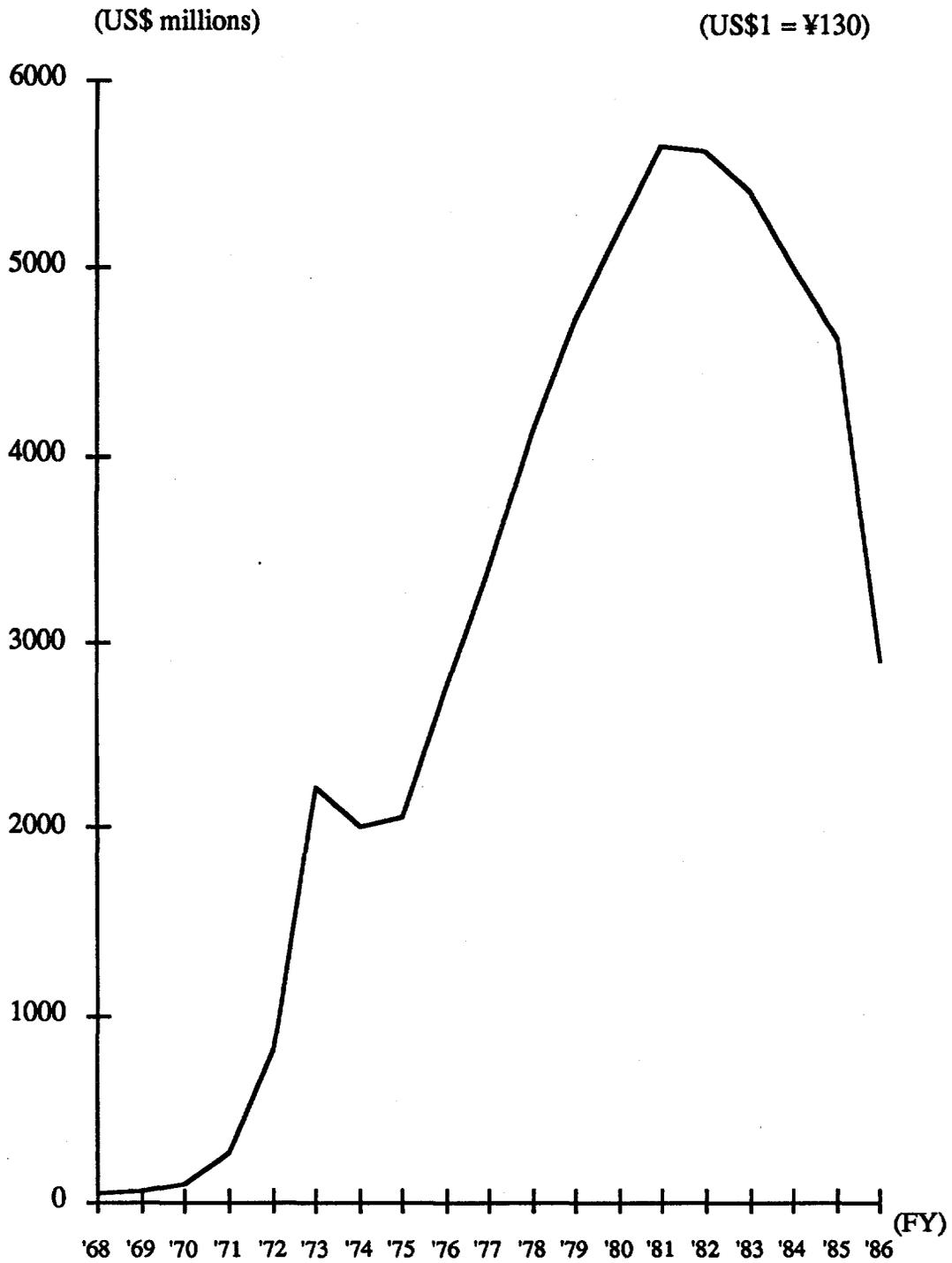
Source: JNR

2.35 Judging from the large capital investments that continued even after it was clear that JNR finances were deteriorating, one can conclude that little consideration was given to economic efficiency in making investment decisions. Under the strict supervision by the Government and the Diet, JNR found it difficult to resist new and politically motivated construction projects. Also, despite the fact that it had been nominally transformed into a public corporation, JNR was generally perceived as a part of the Government. Hence, as with government sectors themselves, it was rare for investment in one year to dip below the amount that had been spent the previous fiscal year. The fact that JNR was not originally designed to make a profit may also have contributed to the minimal concern for the economic efficiency of investments.

(Subsidies)

2.36 In principle, JNR was fiscally independent as a public corporation, and the Government did not subsidize losses incurred through JNR operations. Thus, when JNR operated at a deficit in 1964, it was forced to borrow money to cover its inadequate cash flow. As JNR's debt accumulated, however, by 1976 the Government began providing subsidies for part of the interest on the outstanding loans. These subsidies were in addition to those the Government was already providing JNR to operate unprofitable lines. As a result, Government subsidies grew steadily. The total amount of subsidies received by JNR from the time of its establishment in until privatization in 1987 was \$57 billion (¥7.4 trillion).

Figure II-1 Subsidies Provided to JNR



Source: JNR

C. Market Structure and Corporate Performance

C1. Market Structure

2.37 In FY1985, JNR operated a total of 21,000 kilometers of rail lines nationwide. In a single day, JNR passenger trains traveled a total of 1.45 million kilometers, while JNR freight trains traveled approximately 260,000 kilometers. (The total distance covered in a single day by both types of trains was enough to encircle the equator 44 times.)

2.38 Japan has approximately 27,000 kilometers of rail lines which were operated by JNR and more than a hundred private railway companies. With control of about 80% of the total rail lines in Japan, JNR was by far the largest nationwide operator. (Although the private lines differ according to whether they are in metropolitan or regional areas, all operate only within their prescribed regions.)

2.39 JNR initially enjoyed monopoly status, owing to the fact that railway remained the dominant means of transportation. Until the 1950's, JNR had also been the sole operator of the trunk lines and thus experienced almost no competition from private railway companies on these lines. It did, however, face competition in regional transport.

2.40 Gradually, competition from automobiles and aircraft intensified, and JNR lost its competitive edge in all regions except the metropolitan areas and between points connected by the Shinkansen (Bullet Train). Even in metropolitan areas, repeated fare hikes in JNR's final years resulted in fares that were higher than those charged by the private lines.

(Competition)

2.41 Many private railway lines operate throughout Japan, but the largest ones are concentrated in the three metropolitan areas of Tokyo, Osaka, and Nagoya. With the railway private lines carrying more passengers in these areas than JNR, the two entities were in direct competition especially with regard to commuter lines.

Table II-3 Operating Conditions of Private Railways in Metropolitan Areas (FY1986)

	Number of Passengers (Million People)		Number of Large Private Operators
	Private	JNR	
Tokyo	6895	4441	7
Osaka	3589	1088	5*
Nagoya	801	201	2*
Other (Regional Metropolitan Areas)	1025	1374	1
Total	12310	7104	14

* One company is counted twice

Source: Ministry of Transport

2.42 Coastal shipping had a big market share in the freight transport business. Market share was particularly large for raw materials and fuel, which did not yield high transport fees. As a result, JNR rapidly lost its competitive edge during the 1960s. This situation was compounded in the early 1970s by frequent strikes, which encouraged shippers to look elsewhere for dependable service. By the time JNR was privatized, its freight service was virtually negligible.

C2. Size of Corporation

2.43 In FY1985, JNR carried approximately 19 million passengers and 190,000 tons of freight daily, or, about 16% of Japan's total population and the cargo equivalent of 19,000 large trucks.

2.44 In addition to its railways, JNR operated approximately 2,500 buses and 15 cargo and passenger ships, which transported 180 million passengers and 4 million tons of cargo per year.

2.45 JNR's total FY1985 revenues, including railways, buses, ships, and related business, as well as government subsidies, amounted to \$28 billion (¥3.6 trillion). Railway revenues accounted for \$24 billion (¥3.1 trillion), or 86% of the total. (In contrast, in FY1985, the largest private railway operator had total revenues of \$1.6 billion [¥201 billion], of which 34% was earned through railway operations.)

2.46 Operational expenditure in FY1985 totaled \$43 billion (¥5.6 trillion), resulting in a deficit that year of \$14 billion (¥1.8 trillion) with nonoperational revenues amounting to \$1 billion (¥130 billion) included. This deficit was equivalent to a loss of \$39 million (¥5.1 billion) per day.

2.47 In order to cover this deficit, repay loans, and finance construction, JNR had to borrow \$22 billion (¥2.8 trillion) in FY1985 alone. By the end of that fiscal year, its long-term liabilities amounted to \$182 billion (¥23.6 trillion), the equivalent of \$1,600 (¥208,000) for every Japanese citizen, or \$6,400 (¥832,000) for a four-person household.

2.48 The number of JNR employees gradually declined after 1975, dropping to 420,000 by the end of 1980. However, it was still an enormous organization compared with the largest private enterprises operating during the same period. Nippon Steel Corporation, for example, had 80,000 employees; Mitsubishi Heavy Industries, 80,000; and Mitsui & Co., Ltd., about 10,000. JNR was considerably larger than even Japan's Self-Defense Forces, which, though not a corporation, employed 270,000 people.

2.49 JNR also owned numerous facilities scattered throughout Japan, including more than 7,000 operating sites (mostly train stations), administrative departments, hospitals, training schools, and passenger car factories.

2.50 JNR also owned a great deal of land. At the end of FY1985, land reserved for JNR use totaled some 66,000 hectares, an area equivalent to Japan's largest lake, Lake Biwa. Most of the land was used for railway lines and for groves that served to screen the tracks from wind and snow; but there was also a large amount of underutilized land with great commercial potential near railway stations.

Table II-4 Changes in Scale of Operation

	Item	Unit	1965	1970	1975	1980	1985
Scale of Operation	Length of rail lines	km	20,622 [27,487]	20,756 [26,865]	21,154 [26,735]	21,227 [26,805]	20,700 [26,522]
	Passenger cars owned	1,000 cars	168 [193]	181 [202]	153 [173]	132 [153]	69 [90]
	Land owned	1,000 km ²	670 [771]	683 [780]	693 [781]	693 [777]	662 [748]
Trains Operated	Kilometers run by passenger trains (per day)	1,000 train-km	433,353 (1,187) [932,415]	484,099 (1,326) [915,066]	504,726 (1,383) [890,407]	516,117 (1,414) [916,332]	528,251 (1,447) [948,555]
	Kilometers run by freight trains (per day)	1,000 train-km	166,221 (455) [180,331]	196,888 (539) [206,655]	175,953 (482) [181,518]	134,486 (368) [138,397]	95,945 (263) [97,206]
Amount Transported	Passengers transported (per day)	1 million people	6,722 (18.4)	6,534 (17.9)	7,048 (19.3)	6,793 (18.6)	6,941 (19.0)
	Freight transported (per day)	1 million tons	200 (0.54)	199 (0.54)	142 (0.39)	111 (0.30)	69 (0.19)
	Bus transport (Passengers)	1 million people	308	274	248	202	171
	Bus transport (Freight)	1,000 tons	203	91	47	28	-
	Ship transport (Passengers)	1 million people	12.7	13.7	15.2	9.9	9.2
	Ship transport (Freight)	1,000 tons	9,377	12,224	8,895	6,431	4,355

Numbers in brackets [] represent totals for Japan, including private lines.

Source: JNR, Ministry of Transport

C3. Financial Performance

2.51 Until the 1950s, JNR held the position as the provider of the most modern domestic means of transportation in Japan. Until that time, both the number of passengers and the amount of freight transported by JNR continued to rise despite occasional year-to-year fluctuations brought about by changes in the economy. With the exception of a few brief periods, JNR retained solid profitability until FY1963.

2.52 Beginning in the mid-1960s, however, the situation changed dramatically. Rapid advances in technology brought phenomenal developments in the automobile, aircraft, and shipping industries. Accordingly, JNR was overwhelmed in any area of operation where the special characteristics of these other modes of transport could be given full play. As a result, its share of domestic passenger and freight transport fell year by year. Although revenue from passenger services continued to climb, passenger volume peaked in FY1974 and began to decline thereafter. The change was even more devastating for JNR's freight operations. Freight volume peaked in FY1970, and revenue declined sharply after FY1980. Only revenues earned through related businesses, including the sale of assets, continued to increase steadily. Although in FY1985 these revenues represented only a small fraction of JNR's total income, they had increased by approximately 2.7 times over the preceding 10 years.

2.53 After posting its first single-year loss in FY1964 of \$230 million (¥30 billion), JNR continued to operate in the red each year. Beginning in FY1980, annual losses exceeded \$7.7 billion (¥1 trillion) and reached to \$18 billion before subsidies in 1985.

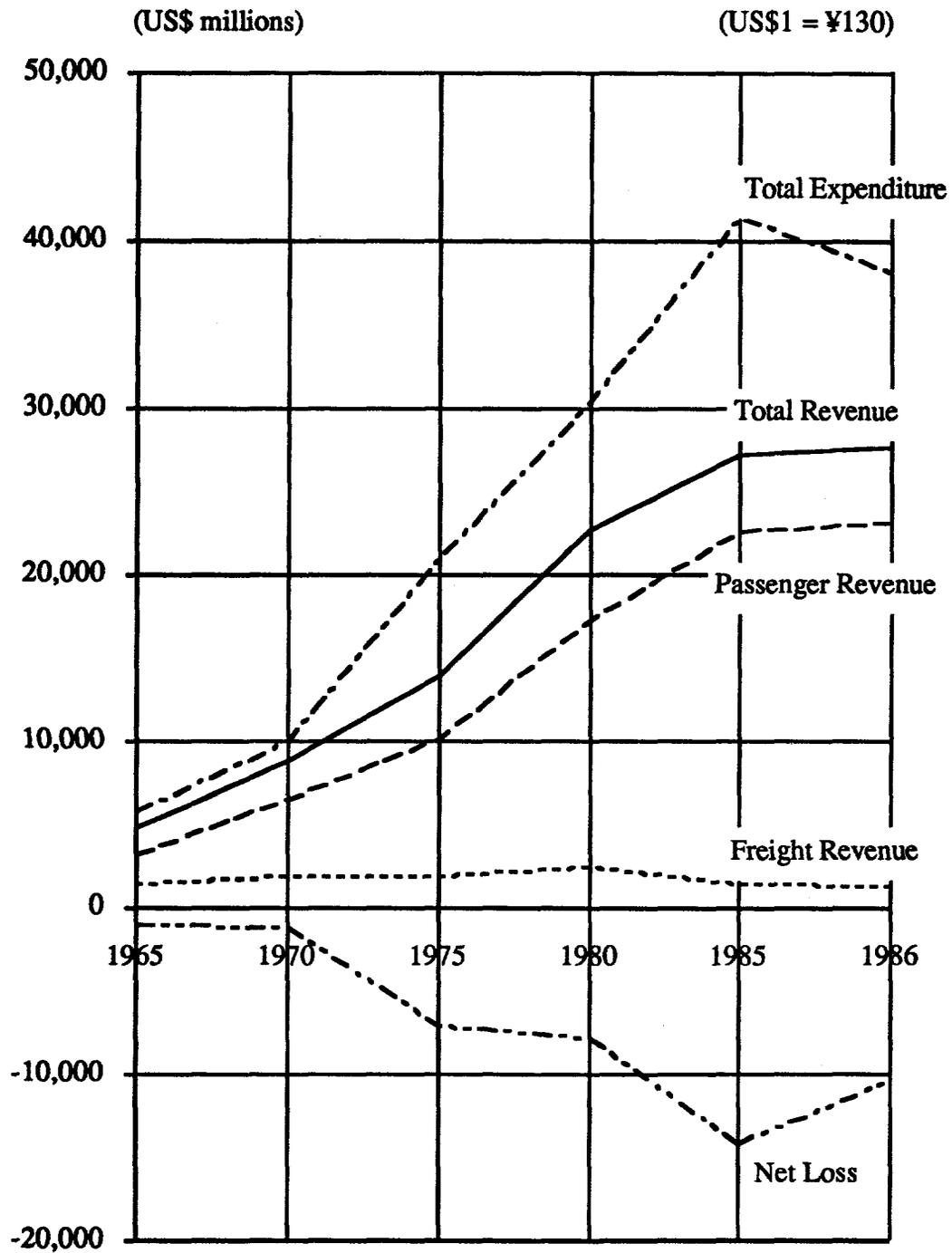
2.54 The causes of the deficit will be discussed in detail later, but in brief they were abnormally high personnel expenses (amounting to 78% of total revenues at their peak, compared with about 40% for private railways), and the burden resulting from excessive capital investment, and from debt from interest accruing on the large volume of debt.

2.55 JNR received considerable subsidies from the Government, amounting to approximately \$4.6 billion (¥600 billion) in FY1985 alone (see table II-5). These subsidies included approximately \$1.9 billion (¥240 billion) charged to the profit and loss account for construction costs, a special grant for remote transportation lines, and a special subsidy for retirement allowances. Subsidies worth approximately \$100 million (¥12 billion) were charged to the capital account for the improvement of transportation facilities in large cities, emergency prevention measures, a special subsidy for the development of technology for a magnetic levitated train, and grants for the special account amounting to \$2.6 billion (¥348 billion) which were to be used to pay the interest accruing from the specific liabilities which had been suspended twice, in FY1976 and FY 1980.

2.56 Like JNR, national railways in European countries also suffer from deficits and were the recipients of sizable government subsidies, as shown in Table II-6 (the year 1981 chosen for the comparison of JNR days). However, there is one difference between Japan and Europe: In Japan, single-year deficits were covered by borrowing, whereas in Europe, they were met each year through subsidies so that no debt was carried over to the next fiscal year.

2.57 Because JNR financed its deficits mostly by loans, a substantial portion of each successive loan was used less for capital investment than for the repayment of previous loans, payment of interest and other operational costs. JNR borrowed money to meet operational costs for the first time in FY1971.

Figure II-2 Status of JNR Operation



Source: JNR

Table II-5 Financial Status of JNR

(Unit: US\$ millions: 1,000 persons)

Fiscal Year	1965	1970	1975	1980	1985	1986 (Final Accounting)
Item						
Total Revenue	4,878	8,813	14,007	22,798	27,329	27,731
Passenger Revenue	3,170	6,510	10,116	17,249	22,632	23,283
Freight Revenue	1,525	1,957	1,858	2,535	1,428	1,288
Miscellaneous Revenue	183	252	512	788	1,405	1,709
Subsidy for P/L Account	—	94	1,522	2,224	1,863	1,448
Total Expenditure	5,824	9,980	21,043	30,555	41,542	38,201
Personnel Expenses	2,377	4,406	9,741	14,298	17,711	16,270
Non-Personnel Expenses	1,774	2,873	6,098	9,472	11,241	9,206
Interest Paid, etc.	497	1,171	3,120	3,665	9,384	10,195
Depreciation, etc.	1,176	1,554	2,154	3,060	4,532	5,138
Other	0	-22	-68	60	-1,325	-2,608
Net Profit (Loss)	-946	-1,167	-7,036	-7,757	-14,214	-10,469
Total Long-Term Liabilities Outstanding	8,540	20,028	52,148	110,762	181,238	192,809
General Liabilities	8,540	20,028	52,148	69,823	140,314	151,885
Suspended Liabilities	—	—	—	40,939	40,924	40,924
	Total of 1949-1967					
Total Subsidies	108	94	2,061	5,201	4,616	2,905
Subsidy for P/L Account	—	94	1,522	2,224	1,863	1,448
Subsidy for Capital Account	—	—	—	318	95	126
Interest Compensation for Suspended Liabilities	—	—	—	2,659	2,659	1,331
Additional Equity (Government)	—	—	539	—	—	—
Number of Personnel	462	460	430	414	277	224

(US\$1=¥130)

Source: JNR

Table II-6 Government Assistance to National Railways in Various Countries (FY1981) [1]

(US\$ millions)

		British Railways Board		Deutsche Bundesbahn	
National Railway Revenues and Expenditures	Revenues	10,016		21,189	
	Transport Revenues	6,981		13,980	
	Compensation and Other Income	3,035		7,209	
	Expenditures	10,143		24,406	
	Expenditure Deductions (Given Separately)	(64)			
	Profit/Loss	-127		-3,215	
Financial Assistance	Assistance Included in Railway Revenues and Expenditures	Compensations		Compensations	4,022
		Compensation for Public Transportation Obligations	3,035	1. Compensation for Short-Distance Passenger Service	2,606
				2. Compensation for Long-Distance Passenger Service Using Fares Determined by Social Policy	60
				3. Compensation for Cooperative Transport Activities	71
				4. Other Operational Compensation	30
				5. Compensation for Maintenance and Operation of Railway Crossing	366
				6. Interest Compensation for Public Bonds Used to Increase Capital	32
				7. Interest Compensation on Debt Associated with Recovery from War Damage	745
				8. Compensation for Road Transport of Trainees	112
	Assistance Not Included in Railway Revenues and Expenditures	Assistance for Expenditure Deductions	64	Compensation for Loss	79
		Subsidies for Maintenance and Operation of Railway Crossings		Subsidies for Capital Investment	2,046
		Special Subsidies		Pension and Other Funds	3,187
		1. Subsidies for Infrastructure	191	1. Subsidies for Pensions and Annuities	3,185
		2. Subsidies for Research and Development	11	2. Cost of Countermeasures Against Tuberculosis	2
		3. Pension Liabilities	180		
	Total		3,290		9,334

Note: Delta - denotes negative figure

Source: Survey Materials of the JNR International Department

Table II-6 Government Assistance to National Railways in Various Countries (FY1981) [2]

(US\$ millions)

		Société Nationale de Chemins de Fer Français	Japanese National Railway		
National Railway Revenues and Expenditures	Revenues	14,425	24,970		
	Transport Revenues	11,028	22,333		
	Compensation and Other Income	3,396	2,637		
	Expenditures				
	Expenditure Deductions (Given Separately)	15,117 (1,729)	33,323		
	Profit/Loss	-692	-8,353		
Financial Assistance	Assistance Included in Railway Revenues and Expenditures	Compensations	<u>2,346</u>	Subsidies for Profit and Loss Account	<u>2,636</u>
		1. Compensation for Providing Low-Fare Service and Building and Maintaining Extra Facilities	43	Subsidies for Construction Costs	1,264
		2. Compensation for Unprofitable Passenger Transport	790	Special Grant for Remote Railway Lines	972
		3. Compensation for Commuter Transport in the Paris Metropolitan Area	303	Special Grant for Promoting Rationalization	28
		4. Compensation for Increases in Free Travel and Reduction Fares	1,038	Subsidies for Operation of Remote Bus Lines	16
		5. Compensation for Fare Restrictions	172	Subsidies for Maintenance Cost of Transportation Facilities in Large Cities	24
		6. Grants (Operational Subsidies)	<u>1,049</u>	Special Subsidies for Retirement allowance	332
Assistance Not Included in Railway Revenues and Expenditures	Allotment for Expenditure Deductions Costs Associated with Basic Facilities and Operation of Railway Crossings Pension Liabilities		<u>1,729</u>	Subsidies for Capital Account	<u>346</u>
				Special Subsidies for Facility Maintenance Costs	251
				Subsidies for Emergency Prevention Activities	75
				Subsidies for Survey Costs for the Construction of Planned Shinkansen (Bullet Train) Lines	15
				Subsidies for Development of Technology for a Magnetic Levitated Train	5
				Interest Compensation for Financial Reconstruction (Special Account)	<u>2,659</u>
				<u>2,968</u>	
Total		8,092	5,641		

Source: Survey Materials of the JNR International Department

2.58 The decision to borrow for operational costs represented a qualitative change in the management of JNR. The Government should have decided at this time either to liberalize fare increase procedures (which remained under legislative control until 1977) and allow JNR to divest itself of unprofitable operations, or to subsidize JNR.

2.59 At that time, however, Japan was in the middle of its high economic growth period, and most people assumed that JNR's transport volume would continue to increase indefinitely. (The report on overall transportation policy submitted in 1971 by the Ministry of Transport's Council for Transport Policy predicted that passenger volume in FY1985 would be 2.2 times that of FY1969 and that freight volume would be 6.8 times larger.) Accordingly, most people believed that even if JNR were temporarily forced to borrow funds to cover operating expenses, it was bound to have sufficient future revenues with which to pay back the loans.

2.60 Deficits were covered by funds borrowed from the Trust Fund Bureau of the Ministry of Finance and other sources. However, such measures only meant that the problem was carried over to the next fiscal year. By FY1986, the year preceding privatization, accumulated debt had swelled to \$193 billion (¥25.1 trillion).

2.61 These conditions led to a rapid increase in subsidies starting in the mid-1970s. During the 12 years from FY1975 to FY1986, JNR received a total of \$51 billion (¥6.7 trillion) in subsidies.

D. Constraints and Issues

D1. Institutional, Regulatory and Legal Constraint

2.62 As described above, JNR suffered a rapid decline in operational viability from the mid-1960s and was on the verge of bankruptcy by the early 1980s.

2.63 JNR was confronted with numerous organizational and managerial problems. As a public corporation, the JNR represented a type of business organization that had very little operational freedom; as a large-scale enterprise, it was difficult to control; and labor-management relations were far from harmonious. As a result, all personnel--from the very top administrators right down to the employees at the lowest level--lacked a corporate consciousness and a sense of responsibility. In other words, many JNR staff felt that "the Government would take care of everything."

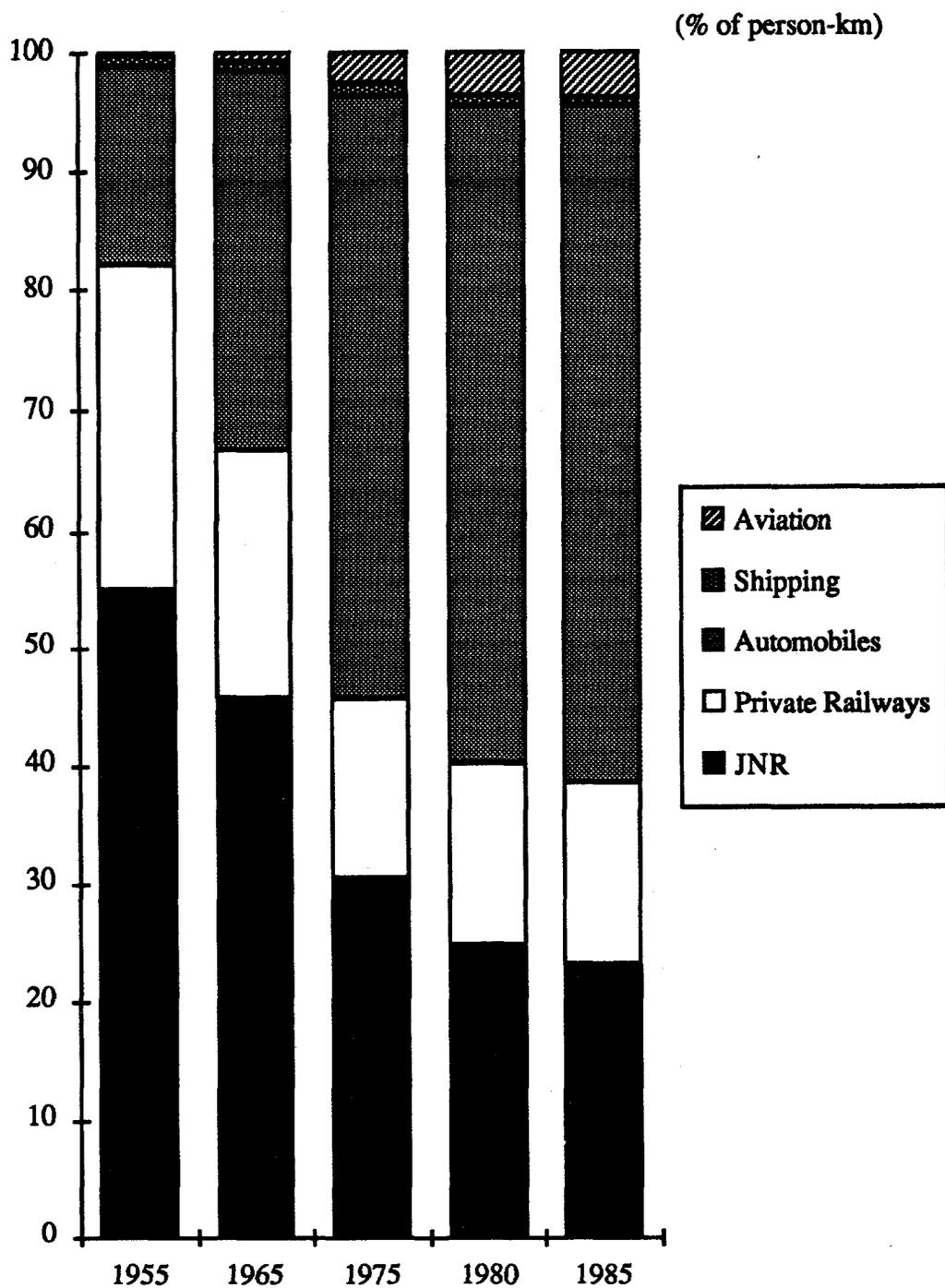
2.64 In general, JNR's operational crisis can be attributed to five causes:

(First: Changes in Transportation Structure)

2.65 After FY1964, the first year JNR posted a single-year loss, JNR's deficit and debts sharply rose. One reason for this was that JNR's share of the overall market was shrinking vis-à-vis private railways and other transport modes such as automobiles, ships, and aircraft.

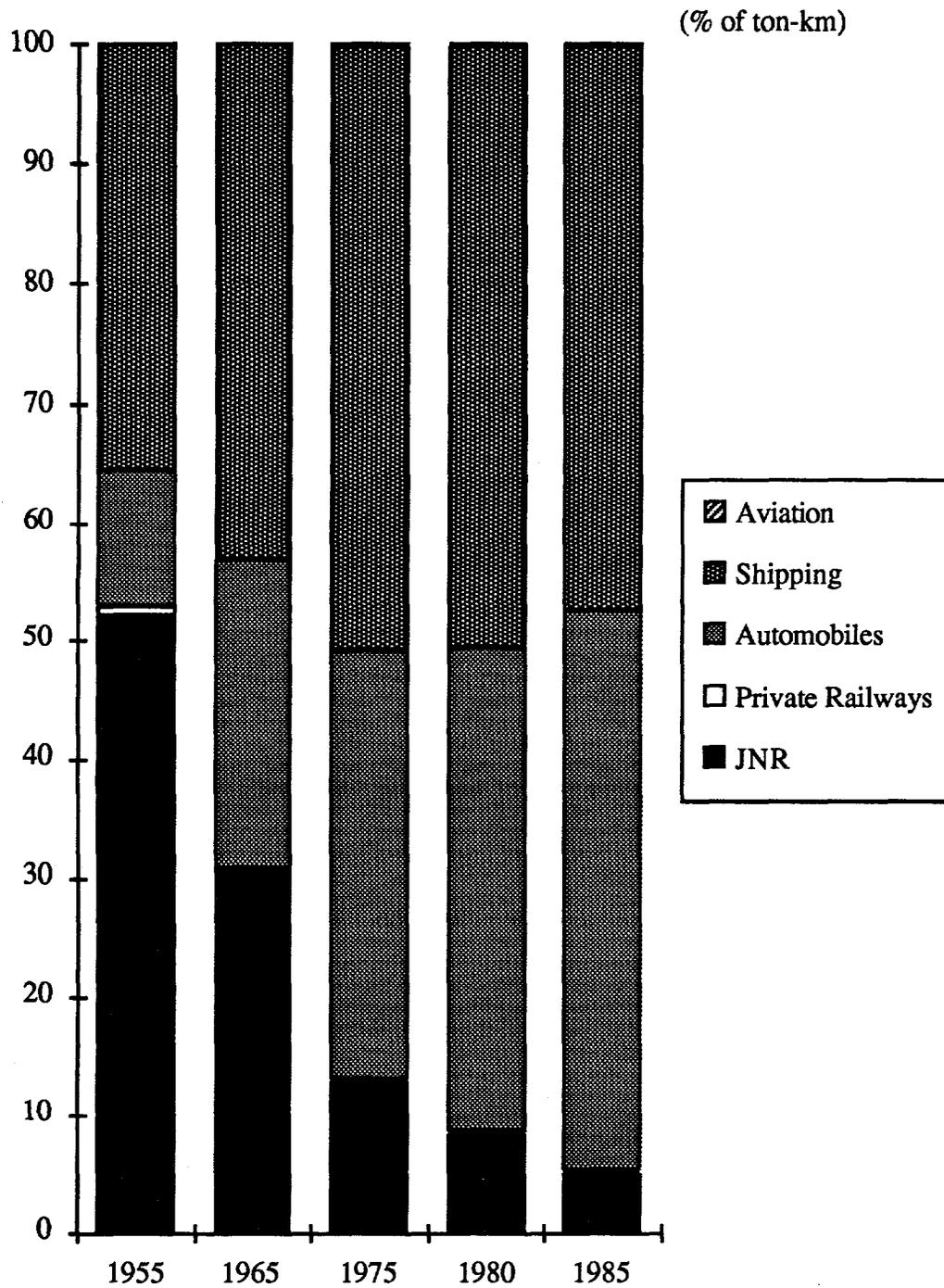
2.66 As shown in Figure II-4, JNR experienced a severe drop in its freight operations. This made the establishment of a separate freight company necessary when JNR was privatized and divided up.

Figure II-3 Percentage According to Passenger Transport Category



Source: Ministry of Transport

Figure II-4 Percentage According to Freight Transport Category



Source: Ministry of Transport

2.67 The main reason for the decline in JNR's market share was the construction of Japan's highway system during the 1960s and 1970s, which resulted in a rapid increase in use of automobiles as a means of transport. In Japan, improvements in the road and highway infrastructure were carried out at a much faster pace than were improvements in railroads because, until recently there had not been adequate discussion about how one should create a comprehensive transportation policy that incorporates railroads, highways and other forms of transportation, and because road transport benefits from financial resources in a special account (resources gleaned primarily from gasoline tax, etc.) that are not available for railroads.

2.68 Both JNR and the private railways lost a significant portion of passenger transport volume during 1955 to 1985. Interestingly, however, in the 10-year period from 1975 to 1985, the private railways actually increased their share slightly, from 15.3%, to 15.5%, while JNR continued to lose ground, slipping from 30.3%, to 23.0%.

2.69 Although both JNR and the private railways suffered from a general shift away from rail travel, there was a marked contrast in their respective performances. This contrast can be attributed to the differences in management policies. Private railways with operations concentrated on local lines responded to the crisis by thoroughly streamlining operations and limiting investments. In contrast, private railways whose main business was in metropolitan areas responded by investing heavily to increase transport capacity. These private companies adopted appropriate, profit-oriented operational strategies to cope with the specific situations they faced. In contrast, JNR failed to concentrate on the areas in which it was still competitive, such as passenger transport between cities, passenger transport within the metropolitan areas, and the mass transport of standardized freight. Instead, on the grounds that it was a public service-oriented enterprise, JNR continued to expand its unprofitable remote railway network.

(Second: Inefficient Investment to Remote Transportation Routes)

2.70 In the seven year period from 1964 to 1970, fourteen remote railway lines were opened. The combined track length of these routes was 248 kilometers. From 1970 to 1976, thirty-three more routes were opened with a combined track length of 674 kilometers, and more than 2,000 additional kilometers were under construction.

2.71 Remote railway transportation routes such as these accounted for more than 40% of the lines run by JNR but represented only 5% of total transport volume. 30% of JNR's remote transportation routes ran at a loss even after receiving government subsidies.

2.72 As shown in Table II-7, transport volume continued to decrease on the remote railway transportation routes. With the 1971 level as 100 percent, volume declined to 76 percent by 1980, with deficits steadily rising in inverse proportion.

2.73 Even though the administration of these remote transportation routes were the primary cause of JNR's operational decline, investments in unprofitable lines continued unabated. This can be attributed to the fact that JNR was established as a public corporation and was not intended to pursue profits. Its operational principles as outlined in Article 1 of the Japanese National Railways Law read: "The Japanese National Railways is hereby established to engage in railway operations and all other operations the state is conducting with funds provided by the Special Account for Japanese National Railways' Undertakings. Through efficient management, the JNR is to extend these operations to further the public welfare." The construction of remote railway transportation routes was conducted solely on the basis of the last principle. In other words, even if transport

volume were extremely low, the construction of unprofitable remote railway transportation routes could be justified if it could satisfy the requirement of furthering the public welfare of local residents. But in general, the principle of "efficient management" was overlooked.

Table II-7 Trends in Transport Volume on Rural Lines

		1971	1976	1977	1978	1979	1980
Transport Volume	Person-km (1 million person-km)	13,199 (100)	12,158 (92)	11,351 (86)	10,782 (82)	10,373 (79)	10,008 (76)
	Ton-km (1 million ton-km)	3,494 (100)	1,946 (56)	1,748 (50)	1,721 (49)	1,745 (50)	1,479 (42)
Profit/Loss (\$1 million)		-1,065	-2,250	-2,405	-2,622	-2,816	-3,133
Number of Passengers per Car (People)		39 (100)	39 (100)	33 (85)	32 (81)	30 (77)	30 (76)

Figures in parentheses () are index numbers.

Source: JNR

(Third: Problems with the Public Corporation System)

2.74 Most of the responsibility for JNR's difficulties can be attributed to the lack of decision-making authority among the managers nominally in charge, a handicap rooted in the fact that JNR was a public corporation.

2.75 In 1982, the Provisional Committee on Administrative Reform issued a report advocating the restructuring of JNR. The report argued that JNR was "unable to function as a commercial enterprise due to excessive intervention by the Diet and the Government." The meaning of this statement is explained below.

2.76 Because JNR was a public corporation, it could set neither its own budget nor its own fares. Its budget was decided by the Diet and required the approval of the Ministry of Finance and the Ministry of Transport. As detailed below, this process inevitably gave the ruling Liberal Democratic Party (LDP) a larger role in determining the content of the budgets that were to be sent to the Diet for consideration.

2.77 First and foremost, JNR needed the approval of the Ministry of Finance in order to ensure that its various requests were properly reflected in the proposed general budget. But JNR itself lacked political muscle. Thus, as JNR's financial condition worsened and it looked more desperately to the Government for assistance, it relied more and more on LDP Diet members to influence the Ministry's decisions.

2.78 The budget was not the only aspect of JNR operations subject to outside control. Until FY1977, the Diet also determined fare increases, that all-important source of revenue. In addition, decisions concerning new lines were made by the Government in consultation with the Railway Construction Council. Thus JNR depended heavily on the power of LDP Diet members to influence these decision.

2.79 Inasmuch as the primary goal of Diet members was reelection, LDP politicians obviously tended to expect some kind of compensation, in the form of votes or campaign contributions, in return for exercising their influence on JNR's behalf. At one point, the number of Diet members running for office who were endorsed by the JNR topped 50. And a large share of the materials procured with the more than \$7.7 billion (¥1 trillion) JNR invested in facilities each year was purchased from businesses that covered most constituencies in Japan. Nearly all contracts between JNR and its suppliers were made without bidding, making the contracts usually more profitable. Politicians could strengthen their status when their supporters did business with JNR.

2.80 The public corporation system described above thus invited political influence, which resulted in the distortion of economic rationality. Conditions were made even worse, moreover, by management's fear that if the entire budget is not used by the end of a given fiscal year, it would be cut the next year. Although this practice aggravated JNR's already poor economic performance, budget expenditures were maintained regardless of their impact. Because JNR decision-makers lacked any real authority as long as the Diet had control of the budget, they tended to take a lax attitude toward control of the deficit, believing that ultimately the Government would have to take care of it. Unlike the other two public corporations, Japan Monopoly Corporation and Nippon Telegraph and Telephone Public Corporation, JNR lost its monopolistic position in its market relatively early. This resulted in the routinization of inefficient management procedures and accelerated financial deterioration.

(Fourth: Failure of Policy Toward Labor Unions)

2.81 Another important factor aggravating JNR's operational conditions was unstable labor-management relations. Because JNR was unable to gain the full cooperation of the unions, it was unable to promote rationalization or increase productivity.

2.82 JNR's union problems were complicated because four unions were locked in an intricate pattern of confrontations. Most JNR workers belonged to one of four different unions: the National Railway Workers' Union (NRWU), the National Motive Power Union (NMPU), the Japan Railway Workers' Union (JRWU), or the All National Railways' Permanent Way and Construction Labor Union (ANRPWCLU). NRWU was the largest union, having at its peak 570,000 members. Along with the All Japan Prefectural and Municipal Workers' Union and the Japan Teachers' Union, the NRWU was one of the most influential of the unions belonging to the General Council of Trade Unions of Japan (Sohyo), the national-level labor organization affiliated with the Japan Socialist Party. NRWU was also a leader in the Japanese labor movement as a whole. Its combative posture was characterized by frequent changes in strategy beginning in 1970. The NRWU aimed to achieve its goals by continued confrontation with JNR management while at the same time remaining in close communication with JNR's personnel bureau in charge of labor.

2.83 The NMPU, on the other hand, was a trades union made up of some 40,000 engineers and operators, and its stance toward management was often considered more aggressive than that of the NRWU.

2.84 Both the NRWU and the NMPU belonged to the Socialist-affiliated Sohyo. On the other hand, JRWU with some 40,000 members identified itself with the Democratic Socialist Party and the Japanese Confederation of Labor, and advocated cooperation between labor and management. These three main unions pursued their goals through

negotiations with management, meanwhile engaged in in-fighting for the most advantageous position within JNR.

2.85 A bit of historical background is needed in order to understand JNR's labor situation more clearly. As JNR's deficit began to snowball, the corporation introduced in the early 1970s a large-scale rationalization-productivity drive called the Productivity Improvement Movement (PIM). This movement was based on three principles: "Prevention of Unemployment," "Cooperation Between Labor and Management," and "Fair Distribution of Results Among Labor, Management, and the Consumer."

2.86 Because one of these three principles called for cooperation between labor and management, PIM led to the expansion of the JRWU, which was associated with the Democratic Socialist Party. In 1970, before PIM was initiated, the NRWU had 270,000 members. One-and-a-half years later, membership stood at 220,000, after losing 50,000 members. During the same period, membership in the JRWU climbed from 70,000 to 100,000. This led to a fierce competition for membership between the NRWU and the JRWU which ultimately damaged human relationships and devastated the workplace.

2.87 The NRWU claimed that PIM, which was led by management, constituted an unfair labor practice designed to undermine the unions. Some of the NRWU's claims were upheld by a governmental arbitration agency, and the mass media supported the union by criticizing PIM. As a result, the movement ended in total defeat for management.

2.88 As a result of PIM's failure, management pursued a policy of maximum accommodation to the NRWU, which, as mentioned above, opposed rationalization. Thus, the effort to streamline the workforce came to a near standstill. As shown in Table II-8, once PIM was abandoned, no substantial changes in the number of JNR employees were achieved, particularly in the period from 1975 to 1980. This fact is in marked contrast to the large-scale rationalization programs carried out by the private railways in response to the oil crises of 1973 and 1979.

Table II-8 Trends in the Number of JNR Employees

(Unit:1,000 people)

Fiscal year	1945	1950	1955	1960	1965	1970	1975	1976	1977	1978	1979	1980
Employees	(538)	474	443	448	462	460	430	429	429	427	421	414

Figures represent the number of employees at the end of each fiscal year.

Source: JNR

2.89 Although rationalization was postponed, JNR experienced numerous discipline problems in the workplace after PIM failed. Employees became accustomed to taking unauthorized or sudden days off; dress codes went unenforced; and it became common to receive allowances and overtime work that had no basis in actual services rendered. According to materials submitted by JNR to the Provisional Committee, the labor productivity index for 1980 (setting the 1970 level as 100) stood at 103, compared to 140 for private railways.

(Fifth: Distortion in Age Structure)

2.90 JNR's deficit, however, was not solely the fault of management and the labor unions. The fact that JNR had absorbed many repatriates after World War II also had a considerable impact on personnel expenditures, which were themselves a major source of deficit.

2.91 After World War II, JNR absorbed some 250,000 people repatriated from China and other countries. This resulted in a marked distortion in the age structure of JNR personnel, particularly when compared with such organizations as Nippon Telegraph and Telephone Public Corporation (NTTPC; later to become NTT) and the postal service.

2.92 In 1980, the average age of JNR employees was 39.8, not much higher than NTTPC's 37.0 and the postal service's 39.1. However, in terms of number of years served, JNR employees averaged 21.1, almost 3 years more than employees in the other two organizations.

2.93 In short, the people hired directly after Japan's defeat in World War II began retiring in increasing numbers from 1980 to 1983, and their retirement allowances and pensions put a huge strain on JNR's finances. As shown in Figure II-5, JNR's pension fund revenue exceeded expenditure until FY1975, but this relationship was reversed in 1976.

2.94 The distortion in age structure also had a great effect on ordinary personnel expenditures, which started to rise dramatically in FY1970. By FY1982, total personnel expenditures (including those appropriated to the asset account) amounted to \$20 billion (¥2.66 trillion), or 78% of JNR's \$25 billion (¥3.3 trillion) in total operational revenues. This was clearly much higher than the approximately 40% of their budget that characterized the private railways.

D2. Management Performance in Reform Efforts

2.95 After 1964, the point when JNR first went into the red, reconstruction plans were repeatedly formulated, abandoned, and replaced by new plans.

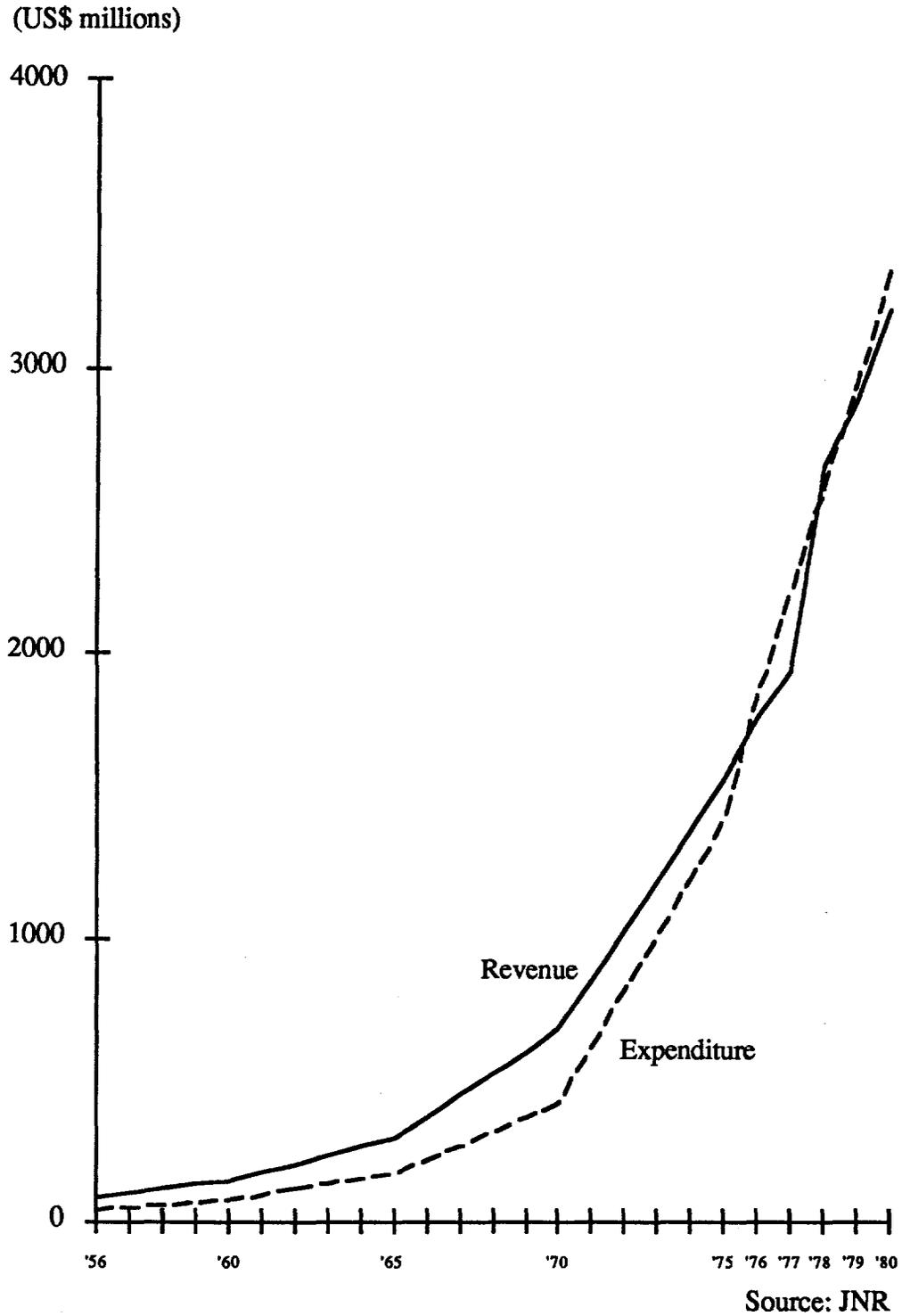
(First-Period Reconstruction Plans: Plans That Relied on an Increase in Transport Volume)

2.96 From about 1970 to 1975, all reconstruction plans were premised on major increases in transport volume, which were expected to accompany the country's high economic growth.

2.97 The objectives of all of these plans were to return JNR to the black within 10 years and were based on the following three assumptions:

- (a) Transport volume would continue to increase;
- (b) Capital investment should therefore be vigorously pursued;
- (c) Fares should be raised every three years.

Figure II-5 Trends in Pension Fund Revenue and Expenditure



2.98 However, the first reconstruction plan, which was implemented in 1969, was abandoned after three years. The increase in automobiles for private use resulted in a lower passenger transport volume than anticipated and was one of the factors leading to the failure of this plan. A second factor was the stagnation of freight transport volume, which was attributed to increases in truck transport and reduced transport of primary commodities such as coal and lumber as a result of changes in the country's industrial structure. A third factor was that personnel expenditures rose at a much faster rate than anticipated. The plan had assumed an annual increase in these expenditures of 9%, but actual rates were 13.4% in FY1969, 15.2% in FY1970, and 14.0% in FY1971.

2.99 The second reconstruction plan, which took into consideration the failure of the first plan, was to be implemented over a 10-year period from FY1972 to FY1981. However, the fare increases and other measures that formed the basis of the plan became material for political wrangling in the Diet, leading to the abandonment of the plan.

2.100 It was not until 1973 that a plan based on an official reconsideration of the public corporation system was launched. Though this plan was intended to cover the 10-year period (from FY1973 to FY1982), it coincided with the first oil crisis and was shelved within a year.

(Second-Period Reconstruction Plans: Plans That Relied on Large Fare Increases (abandonment of efforts to increase transport volume))

2.101 The fourth reconstruction plan, formulated in 1975, contained the following four points:

- (a) Fares would be doubled over the two-year period of FY1976-77 at a rate of increase of 50% per year;
- (b) The Government would allow JNR to withhold repayment of part of its debt;
- (c) JNR would promote rationalization;
- (d) These measures would lead to a balanced budget, at least on the surface, in two years.

2.102 This plan was significant for two reasons. First, it indicated that JNR itself had discarded the notion that increased revenues could be achieved through a large increase in transport volume. In view of the underlying premises of previous reconstruction plans, JNR's recognition that transport volume would not continue to expand by leaps and bounds represented a significant shift. Second, this plan called for the creation of a new account that would handle part of JNR's debt under separate financial management, thus separating it from JNR's normal operational burdens for a fixed period. This meant transferring \$23 billion (¥3 trillion) that had been borrowed from the Trust Fund Bureau of the Ministry of Finance (funds derived primarily from postal savings) into a completely separate account. Interest on this loan was to be paid through subsidies provided through the Government's general accounts budget, which was also providing JNR with interest-free funds to be used to repay the principal.

2.103 Because it advocated a doubling of fares in two years, the plan alienated much of the public. Relations between JNR and the public were already strained because of an illegal strike that had completely shut down train service for eight days in December 1975.

Under these circumstances, public opinion could not be expected to tolerate a 50% fare increase for two consecutive years. Partly because the implementation of the first 50% raise was delayed (planned for April 1976 and implemented in November 1976), the original plan to balance the budget in two years (1976-1977) was revised in the fifth reconstruction plan, which sought to achieve a balanced budget by FY1979.

2.104 However, it was widely recognized that the prospects for implementation of the revised plan were extremely poor. It was felt that it would be difficult to achieve a recovery from past losses only through increases in transport volume and fares. On the basis of this recognition, the plan approved by the Cabinet in January 1977 was revised by the same body less than a year later in order to give it a new direction. In December 1977, the Cabinet redefined the goal of fare increases as merely a means of "preventing further financial deterioration" and embarked on a new course of action. New emphasis was placed on "the efforts of JNR to operate on a commercial basis on its own" and on "measures, including government assistance, that are needed to counter the structural deficits currently exceeding the limits of the financial burden that can be placed on JNR operations." What this meant was that the reconstruction target in the revised plan approved by the Cabinet at the beginning of the year was shelved by the same Cabinet by the end of that year.

(Making Fare Adjustments More Flexible and Expanding the Investment Framework for Related Businesses)

2.105 The reconstruction plans for 1976 and 1977 were thus quickly abandoned. But amidst their failure, two structural reforms were achieved in 1977 that had important implications for JNR operations.

2.106 First, fare adjustments no longer required a legal amendment of law and could be carried out under ministerial approval. Since an amendment of law required Diet approval, attempts to raise fares before the reform were constantly hindered by deadlocks or political maneuvering among members of the LDP, the majority party, the Government, which was trying to get the measure passed, and opposition parties, which were trying to block it. A revision of a law could be repeatedly delayed or abandoned altogether, meaning that hoped-for revenues did not materialize and that even more funds had to be borrowed. Although the reform was considered as enacted too late, it did succeed in taking the issue of fare increases out of the hands of the Diet, making a more flexible approach possible.

2.107 The second reform greatly expanded the range of authorized investments that JNR could make in related businesses. Previously, such investments had been limited to those activities directly related to transport. Under the new measure, JNR could invest in operations that made possible "enhanced use of real estate" and "diversification of commercial activities." This measure opened the way for ventures in hotel management and the development of tourism.

("Plan with No Successor": Special Act for the Promotion of JNR Reconstruction)

2.108 Based on Cabinet approval received in December 1977, the Government and JNR began drafting a new reconstruction plan that consisted of two main elements: "request for government assistance for operations that had structural deficits," and "fiscal balance for operations that had no structural deficits." In November 1980, these ideas were embodied in the Special Act for the Promotion of JNR Reconstruction (JNR Reconstruction Act). The main elements of this Act included the following:

- (a) JNR would, on its own initiative, prepare a rigid operational reform plan (Management Improvement Plan);
- (b) Unprofitable local lines (special remote transportation routes) would be phased out through measures such as conversion to bus routes;
- (c) Government assistance, especially the current suspension of debt repayment, would be extended;
- (d) The foundation for healthy operations would be established by FY1985.

2.109 During the process of enacting this legislation, the LDP attached a party resolution which stated that this would be the final plan, the "Plan with No Successor."

2.110 After the legislation passed the Diet, JNR began drawing up a plan for thorough operational reform with the following provisions: continued suspension of long-term liabilities, reduction of the work force by 74,000, to 350,000 employees by FY1985, and the rationalization of unprofitable remote lines. In May 1981, the plan received formal approval from the Minister of Transport. To comply with the law's requirement that the "foundation for healthy operations be achieved by FY1985," the plan ultimately aimed to achieve a balanced budget in all trunk line operations, excluding the following three sectors:

- (a) Deficits caused by the unprofitable remote lines;
- (b) Extraordinary increases in outlays for retirement allowances and pensions caused by the distorted employee demographic structure;
- (c) Interest accruing from loans to cover the previous two deficit items.

2.111 In the end, however, this plan was also abandoned before any results were achieved. Although formulated with the intention of making this plan different conceptually from the four preceding plans that had failed, this plan can be viewed as an extension of the past plans: it was still predicated on the maintenance of government subsidies at FY1980 levels and made no provision for necessary reductions in the scale of investments. For these reasons, the attempted reform failed. We have already discussed how, even as this final plan was getting under way, the reformers switched their target to privatizing and breaking up JNR. The last plan's failure can be attributed to the sense of distrust the whole nation felt about the traditional JNR's notion that "the Government will take care of everything."

Table II-9 Detailed Summary of JNR Reconstruction Plans [1]

	Plans That Relied on Increases in Transport Volume		
	Planned: FY1969 to FY1978/Implemented: FY1969 to FY1972	Planned: FY1972 to FY1981/Implemented: Abandoned	Planned: FY1973 to FY1982/Implemented: FY1973 to FY1975
Basis for Measures	Basic Policy Concerning the Financial Reconstruction of JNR (Cabinet ratification 9/12/69)	Summary of New Financial Reconstruction Measures for JNR (Memorandum 1/11/1972)	Concerning the Financial Reconstruction Measures for JNR (Cabinet approval 2/2/73)
Related Legislation	Reform of the Japanese National Railways Fares Law and Enactment of the Financial Reconstruction Act (5/9/69)	Reform of the Japanese National Railways Fares Law and the Financial Reconstruction Act (Proposal abandoned 6/16/72)	Reform of the Japanese National Railways Fares Law and the Financial Reconstruction Act (9/18/73) Further reform of Japanese National Railways Fares Laws (extension of time limit for revisions 3/30/79)
Goals	Surplus after depreciation in FY1978	Fiscal balance achieved by FY1981	Fiscal balance achieved by FY1982
Amount of Investment	\$28.5 billion	\$53.8 billion	\$76.9 billion
Fare Increase	Real income increased 13% in FY1969; further increases of 10% achieved in FY1973 and FY1977, including adjustments of government payments (plan implemented 5/10/69)	Real income increases of 15% in FY1972, FY1975, and FY1978 and study of an additional increase in FY1981; adjustment of government payments	Real income increases of 15% in FY1973, FY1976, and FY1979; real income increase of 10% in FY1982 (plan implemented 10/1/74 and 11/20/75)
Government Assistance	Grants-in-aid to pay the interest on reconstruction debt (grants-in-aid for second-generation interest on past debt); subsidies for construction costs	Grants-in-aid to pay for interest on reconstruction debt (targeted against expansion of past debt); subsidies for construction costs (increased subsidy rate); government outlays	Same as at left.
Reduction of Personnel	60,000 employees from FY1969 to FY1978	110,000 employees from FY1969 to FY1978	Same as at left.
Remote Railway Lines	Transfer of remote transport volume from rail (2,600 km) to road	Removal of inactive remote lines within five years (reducing operating track length by 3,400 km)	Same as at left. However, requires consent of local residents. (LDP General Council Resolution 2/1/72)

Table II-9 Detailed Summary of JNR Reconstruction Plans [2]

	Plans That Relied on Fare Increases		Plans That Aimed at Fiscal Balance in Selected Fields of Operation
	Planned: FY1976 to FY1977/Implemented: FY1976	Planned: FY1976 to FY1979/Implemented: FY1977	Management Improvement Plan (Planned: FY1980 to 1985)
Basis for Measures	Summary of Financial Reconstruction Measures for JNR (Cabinet approval 12/31/75)	Concerning Reconstruction Measures for JNR (Cabinet approval 1/20/77)	Basic Policy for JNR Reconstruction (Cabinet approval 12/29/77) and Concerning the Reconstruction of JNR (Cabinet approval 12/29/79)
Related Legislation	Abolition of the Financial Reconstruction Act; reform of the Law Concerning Fares of Japanese National Railways (50% fare raise) and the Japanese National Railways Law (insertion of requirement for operational viability in Chapter 5, Section 2) (11/5/76)	Reform of the Fare Law (for flexibility) and the Japanese National Railways Law (expansion of fields of investment) (12/16/77)	Special Act for the Promotion of JNR Reconstruction (11/28/80)
Goals	Fiscal balance achieved over the two-year period between FY1976 and FY1977	Fiscal balance achieved by FY1979	Establishment of a base for sound operation by FY1985, with recovery of fiscal balance achieved as soon as possible thereafter
Amount of Investment	\$39.2 billion	\$39.2 billion	Limited to existing levels
Fare Revisions	Income increased 37% and 50% in real and nominal terms respectively in FY1976 (Plan implemented 11/6/76)	Fare increases necessary to recover fiscal balance	Fare increases implemented as needed on the basis of managerial decisions made primarily by JNR itself
Government Assistance	Grants in aid to pay the interest for fiscal reform (suspension of past debt payment); subsidy for construction costs; special grant for remote transportation routes	Same as at left, plus assistance, such as a subsidy for maintenance of transportation facilities in large cities.	Extension and expansion of existing assistance, centering on countermeasures against structural problems, including the waiving of past debt.
Reduction of Personnel	15,000 employees by FY1980	Same as at left.	74,000 employees by FY1985, for a total of 350,000 employees
Remote Railway Lines	Study for methods for handling unprofitable remote routes	Promotion of operational reform of remote transportation routes	Special fare assistance and rationalization of some 10,160 km of remote routes (about 2,900 km of which would be rationalized through conversion to bus routes by FY1985)

III. PRIVATIZATION: OBJECTIVES AND STRATEGIES

A. Objectives of Privatization

A1. Removal of Fiscal Drain

3.1 After the oil crisis of the 1970s, the Japanese economy experienced both a considerable reduction in its growth rate and increased financial deficits. As a result, fiscal reform became one of the important issues of the 1980s. The LDP suffered a crushing defeat in the 1979 election as a result of its attempt to introduce a general consumption tax, and the government had to pursue fiscal reform by reconstruction of the country's administrative system without increasing taxes. This situation resulted in the establishment of the Provisional Committee on Administrative Reform (Provisional Committee) in March 1981, a deliberative committee under the direct control of the Prime Minister. The Provisional Committee's objectives were: to reevaluate Japan's administrative system which had greatly expanded during the high-growth period; to consider how benefits and responsibilities should be distributed among citizens as the society aged in the 21st century; and to devise a plan to reconstruct and increase the efficiency of the administrative system. At the time, JNR was already experiencing a severe financial deficit expected to reach ¥2 trillion [the FY1985 budget listed an actual deficit before subsidies of more than \$17.7 billion (¥2.3 trillion), and estimated fiscal year-end liabilities outstanding of \$181.5 billion (¥23.6 trillion)]. Without any counterplan, such a huge deficit would become a tremendous burden on the public in the future. Reform (privatization) of JNR was therefore of key interest to the Provisional Committee.

3.2 The main purposes in restructuring JNR, which was at that time facing a severe financial crisis, were to stop the fiscal drain by improving managerial efficiency through privatization and to create a commercially viable system that would no longer require government assistance.

A2. Introduction of Competition and Improvement of Efficiency

3.3 Radical changes in Japan's railway-centered transportation structure caused by advances in motorization and increased use of air transport, as well as JNR's failure to respond adequately to these changes by implementing new policies and improving productivity, were the two primary reasons why JNR had reached a state of crisis.

3.4 The factors that had prevented JNR from responding flexibly to changes in transportation demand were: (a) Outside interference, (b) Obscure managerial responsibility, (c) Abnormal labor-management relations, and (d) Legal limitations on the scope of business. As these were structural problems inherent in the public corporation system, they could be solved only by abandoning that system. Public corporations are thought to function effectively in a monopolistic environment; but once the monopoly is lost and competition and efficiency come into play, the public corporation system has proven ineffective. In the case of JNR, it was necessary to carry out privatization, loosen government regulations so that they were no different from those applied to other private railways, introduce the principles of competition and efficiency required of a private company, and change the attitudes of both management and labor.

3.5 The failure of JNR was not solely attributable to its structure as a public corporation; it was also a consequence of its size. This nationwide company was simply too large to be controlled adequately by a single managerial body. Those in the railway

business must be sensitive to local demands and provide convenient services for their customers. Once JNR was broken up, it was possible for the management of each company to implement their own policies in accordance with their needs and have the policies implemented throughout the entire organization, thus making it easier to provide regionally-based service. Another benefit derived from the creation of several similar companies out of one larger one was the creation of competition. Competition between the new companies and private companies within each respective area was expected to result in improvements in managerial efficiency. This had been all but impossible to achieve as long as JNR remained a single nationwide company.

3.6 During the process of reform, JNR management opposed the breakup of the company saying it was unnecessary. They argued that JNR could be restructured by delegating managerial authority to regional bureaus. However, it was impossible to delegate the authority for making critical decisions such as those concerning personnel, finance, and managerial policy. Moreover, it would have been impossible to achieve the desired goal through such an approach. Eventually, even management conceded that division was necessary to improve managerial efficiency.

A3. Elimination of Redundant Work Force

3.7 JNR had many redundant employees. Although it had reduced its work force in previous years, it still employed approximately 387,000 people in FY1982 and had personnel expenditures that were the equivalent of 78% of JNR's total operating revenues. Admittedly, rapid increases in the number of retirees had resulted in unusually high outlays for severance and pensions (15%); but personnel expenditures were unacceptably high, particularly when compared with the industry norm of 40%. Drastic cuts in the work force were imperative.

B. Strategy Formulation

B1. Creation of the Supervisory Committee for JNR Reconstruction

3.8 The policy of privatizing and breaking up JNR in order to respond to the managerial crisis was outlined in the Third Report submitted by the Provisional Committee on Administrative Reform (Basic Report). The report also recommended the enactment of special legislation to establish a Supervisory Committee for JNR Reconstruction which would formulate concrete privatization strategies.

3.9 The chronology of events from the time the Provisional Committee on Administrative Reform was established until privatization was implemented is shown below.

- 3/81: Establishment of the Provisional Committee on Administrative Reform (Provisional Committee)
- 3/81-5/82: Deliberations by the Provisional Committee
- 7/82: Third Report by the Provisional Committee (Basic Report)
- 8-9/82: Adjustments made to the report by the LDP
- 9/82: Ratification of the Cabinet's "Outline for Administrative Reforms"

- 9/82-5/83: Diet deliberations (legislative proposal concerning the establishment of the Supervisory Committee for JNR Reconstruction)
- 6/83: Establishment of the Supervisory Committee for JNR Reconstruction
- 6/83-7/85: Deliberations by the Supervisory Committee
- 7/85: Report submitted by the Supervisory Committee ("Views Concerning the Restructuring of JNR").
- 8-10/85: Adjustments made to the report by the LDP
- 10/85: Ratification of the Cabinet's "Basic Policy on JNR Restructuring"
- 10/85-3/86: Government drafts legislation, including the JNR Restructuring Law
- 3-11/86: Diet deliberations on legislation, including the JNR Restructuring Law
- 12/86-3/87: Government prepares for the privatization and division of JNR.
- 4/87: JNR corporatized and divided and new JR companies established

3.10 It took six years from the establishment of the Provisional Committee in March 1981 to the corporatization and division in April 1987. If we include the selling of shares to private investors which was delayed until 1992, the entire privatization process will have taken more than 10 years. The crucial period in deciding the ultimate course of privatization was from 1983 to 1985, during which the Supervisory Committee deliberated on various privatization strategies.

3.11 The Temporary Measures Law Concerning Promotion of Reconstruction of JNR Businesses provided the legal basis for the Supervisory Committee and mandated that the Committee carry out two objectives in accordance with the guidelines set out in the Third Report by the Provisional Committee on Administrative Reform. First, it was to review all matters necessary to assure that an efficient managerial structure be devised for JNR and that it be run properly; second, it was to review all matters concerning the repayment of JNR's long-term liabilities. In other words, the Supervisory Committee's mandate was to formulate a restructuring plan for the privatization and division of JNR.

3.12 The Government established the Supervisory Committee by special law for two reasons. First, JNR was already bankrupt. Had it been a private company, it would have been the trustees' job to formulate the restructuring plans. But JNR was a state-owned public corporation, and it was therefore necessary to establish a committee which would draft a plan for reconstruction and later serve as a trustee once JNR was privatized.

3.13 Second, consensus had not been reached concerning the central issues of privatization and division. Although the Provisional Committee had already advocated the privatization and division of JNR in its Third Report on Administrative Reform, many JNR managers and members of the ruling Liberal Democratic Party (LDP) opposed such a policy. Therefore it was thought that although some risk was involved, it was necessary to establish a new committee that would draw up concrete plans while simultaneously building consensus in favor of privatization and division among the parties concerned.

3.14 Within the Government itself, there were a variety of views with respect to how much authority the Supervisory Committee should have. Some felt it should have the kind

of executive powers possessed by the Fair Trade Commission, while others thought it should merely serve as a ministerial advisory council without executive powers. In the end, the Supervisory Committee was not given administrative rights but was placed (as had been the Provisional Committee) under the Prime Minister's direct control. Having considerable authority, the Supervisory Committee expressed its opinions to the Prime Minister, who was required to give these opinions full respect and consideration.

3.15 The Supervisory Committee for JNR Reconstruction consisted of the following five members:

- Chairman: Masao Kamei (Chairman, Sumitomo Electric Industries, Ltd.)
- Deputy-chairman: Hiroshi Kato (Professor, Keio University)
- Member: Mikio Sumiya (President, Tokyo Women's Christian University)
- Member: Shoji Sumita (Director, Japan Transport Economics Research Center)
- Member: Shigeya Yoshise (Governor, The Japan Development Bank)

3.16 Mr. Kamei, Mr. Kato, and Mr. Sumita had served as experts on the Provisional Committee; Mr. Sumita was a former Vice-Minister of Transport, Mr. Yoshise a former Vice-Minister of Finance, and Mr. Sumiya a former professor at Tokyo University. Most members favored privatizing and dividing JNR. Taking a politically neutral stand, the Committee furthered the work begun by the Provisional Committee as outlined in the Third Report on Administrative Reform, which called for the privatization of all three public corporations. The Supervisory Committee carried out its work with the assistance of a secretariat composed of members seconded from the central government offices, including the Ministry of Transport, the Ministry of Finance, the Ministry of Health and Welfare, the Ministry of Labor, and the Management and Coordination Agency.

B2. Arguments of the Supervisory Committee and Various Interest Groups

3.17 Initially, reformist elements were a minority in JNR. The vast majority, including management, favored maintaining the status quo and thus opposed privatization and division. This majority argued that the true task of the Provisional Committee on Administrative Reform and the Supervisory Committee for JNR Reconstruction was to watch over JNR's efforts to implement its own administrative reform plan (target date: FY1985). They argued that if government continued to suspend repayment of long-term liabilities and JNR was allowed to continue its rationalization program, the company would be able to overcome its financial crisis without major structural changes in its management. In the final stages, however, it became clear that the plan had failed. At that point, JNR personnel agreed that their organization should be converted to a stock company, but they insisted that it remain intact as a single nationwide company, resisting to the end the suggestion that it be broken up.

3.18 Four major unions represented JNR employees, the largest being the National Railway Worker's Union (NRWU), which was affiliated with Japan's leading opposition party, the Japan Socialist Party. These unions argued that JNR's troubles were caused by a failure in government transportation policy and inadequate financial assistance by the Government. They also argued for maintenance of the public corporate structure and opposed any change in its managerial system. Later, policies among some of the unions

shifted to a more flexible policy stance, and the largest union, NRWU, eventually lost influence as more and more of its members retired.

3.19 Within the Japanese political process, the LDP had decisive power because it was the party in power and therefore played a considerable role within the government administration in the drafting of new legislation. Initially, most of the LDP Diet members who were influential on the transportation administration supported the majority in JNR who favored maintaining the status quo and opposed privatization and division. They felt that priority should be given to the implementation of JNR's own administrative reform plan and were strongly against break-up into smaller companies on the grounds that it would cause political chaos. However, some powerful party members maintained contact with reformers within JNR and pushed for privatization and division. As public opinion moved in favor of this option, the number of LDP party members supporting it also increased.

3.20 JNR restructuring was favored by top government officials. Both Zenko Suzuki, who was Prime Minister when the Provisional Committee was formed, and Prime Minister Nakasone, in power when the Supervisory Committee was formed, were ardent supporters of JNR restructuring. The Ministry of Finance also supported fiscal reform and therefore also threw its weight behind JNR restructuring. The Ministry of Transport, which directly supervised JNR, took a more or less neutral stance at first, waiting to hear the recommendations of both the Provisional and Supervisory Committees. Later, however, the ministry came out for privatization and division and also advocated that passenger service and freight service be separated.

3.21 The Provisional Committee and the Supervisory Committee played pivotal roles in the restructuring of JNR. The Supervisory Committee continued its predecessor's work by formulating concrete reform proposals. Having the support of public opinion and business circles, these committees succeeded in gaining the Prime Minister's and the government's support as well as convincing ruling LDP members, JNR management, and many other individuals and groups that restructuring was the appropriate solution to JNR's difficulties. In the end, these efforts made it possible for the Government to propose privatization and division.

B3. Strategies for Privatization

3.22 According to Professor Hiroshi Kato, a member of both the Provisional and Supervisory committees, "privatization" can be conceived in terms of two factors: government ownership of shares and government control of operations. One may define it broadly as "the process of creating a private company through the sale of government stock." Defining the horizontal axis of Table III-1 as differences in the form of stock ownership and the vertical axis as the degree of government control, the process of privatization can be seen as a move directed toward the lower right-hand corner.

3.23 Some concrete examples of the types of enterprises that fall into each category might clarify the concept. For example, enterprises defined as "part of the government sector" include the mint and postal services. Enterprises belonging to both the "privately owned" and "privately controlled" categories are ordinary private corporations. Intermediate categories include "special enterprises" such as NTT, in which the government has some stock and over which it has some indirect control. It also includes "public service enterprises" such as private railways, airlines, and electric and gas companies, which are privately owned but remain indirectly controlled by the government. JNR was classified as a "public corporation," a state-owned enterprise (SOE) subject to very strict government control.

a "public corporation," a state-owned enterprise (SOE) subject to very strict government control.

Table III-1 Classification of Enterprises by Ownership and Type of Control

Ownership	Fully owned by Government	Partly owned by Government	Privately owned
Type of control			
Directly controlled by Government	Part of Government Sector		
Indirectly controlled by Government	Public corporation (JNR)	Special enterprise (NTT)	Public service enterprise (Private railways company)
	Stock company (JR now)		
Privately controlled			Private enterprise

3.24 JNR privatization consists of two phases. In the first phase, now completed, JNR was converted into a stock company and government control was relaxed. In the second phase, which has yet to be implemented, all stocks being sold to private investors, thereby completing JNR's transformation into a privately owned company.

3.25 Because JNR was virtually in a state of bankruptcy, it would have been difficult to sell stock directly to private investors. Thus, this two-phase approach was adopted in order to provide an intermediate stage. The objective of the first phase was to create the conditions necessary to induce private investment by running JNR competitively and efficiently, like a private company. Once this was accomplished, the Government would be well positioned to sell its shares in the second phase.

3.26 In July 1985, the Supervisory Committee submitted its written opinion concerning JNR restructuring to the Prime Minister. This contained the following "strategies for privatization." (Paragraphs 3.27 through 3.30).

3.27 Management Form

- (a) The privatization of JNR is to begin in April 1987. The passenger railway division is to be divided into six regional companies and the freight railway division converted into a single nationwide company. Initially, the new companies are to take the form of stock companies owned by the JNR Settlement Corporation, a government agency. In a second stage, the government will gradually sell off its stock to private investors, converting the corporation into a "privately owned company" as quickly as possible. Government supervision and restrictions on the new companies will be reduced to a minimum so that a new management system, in which management can effectively exercise its responsibility and authority, will be

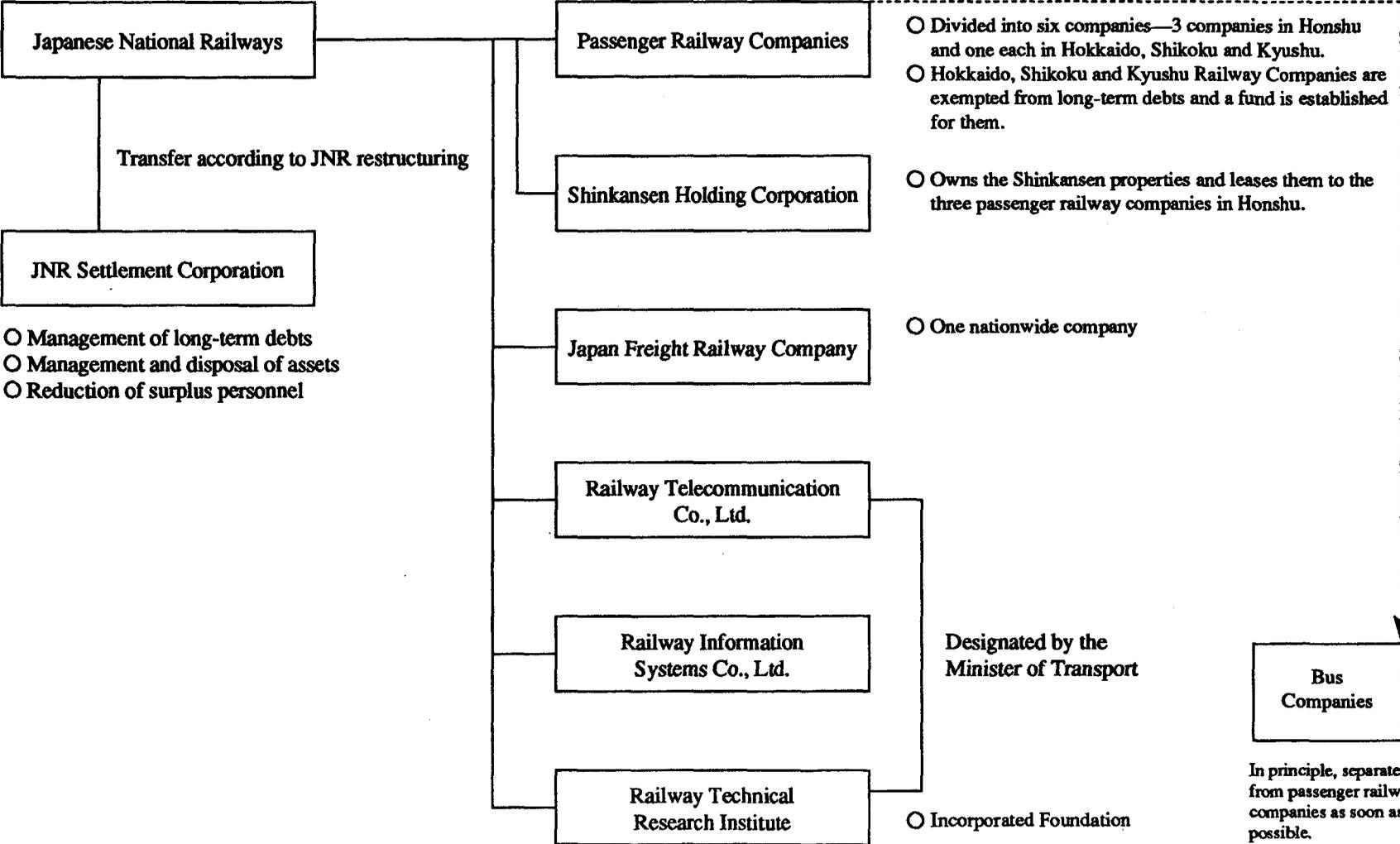
(b) The passenger railway division will be divided into six companies: three on the main island of Honshu and one each on the three islands of Hokkaido, Shikoku, and Kyushu. It is important that the divisions match the actual flow of regional passengers. The three Honshu-based companies will cover the following geographical areas:

- (i) Travel within the Tokyo metropolitan area and eastward [This later became the East Japan Railway Company (JR East Japan)]
- (ii) Travel on the Shinkansen (Bullet Train) line between Tokyo and Osaka and in the central region of Honshu [This later became the Central Japan Railway Company (JR Central Japan)]
- (iii) Travel in the Kinki metropolitan area centering on Osaka and westward [This later became the West Japan Railway Company (JR West Japan)]

98% of the rail trips initiated in each of these three regions are completed without crossing into other regions. Corresponding percentages for the three island companies (Hokkaido, Shikoku and Kyushu) range from 95% to 99%. These extremely high rates of self-completion for all six regions indicate that the geographical divisions are appropriate.

(c) To ensure that the new companies maintain a solid managerial base with profits at approximately 1% of operating revenue, the following measures for profit adjustment will be taken. As for differences in Shinkansen (Bullet Train) lines, capital costs among the three Honshu companies will be adjusted through a leasing scheme by a government-run holding agency (later to become the Shinkansen Holding Corporation). Since the profitability of the three island companies is questionable, these companies will be exempted from their long-term liabilities and subsidized through a newly established Management Stabilizing Fund. This fund will be established in the three island companies by obtaining funds from the Settlement Corporation. The Settlement Corporation will borrow the necessary funds from the Shinkansen Holding Corporation; thus, the burden ultimately will fall on the three Honshu companies.

Chart III-1 Reorganization Recommended by the Supervisory Committee



- Management of long-term debts
- Management and disposal of assets
- Reduction of surplus personnel

3.28 Reducing Excess Personnel

The number of excess personnel is estimated at about 93,000, of whom 20,000 will volunteer for retirement and 32,000 will be transferred to the new companies. (The appropriate number of personnel for the new companies is 183,000; the actual number of transfers to the new companies is therefore estimated at 215,000.) The JNR Settlement Corporation will continue to employ the remaining 41,000 excess personnel for up to three years, during which time the Government, through the issuance of a special law, will seek new employment for them in local governments and private companies.

3.29 Disposition of Long-Term Liabilities

- (a) JNR's total long-term liabilities are estimated at \$286.9 billion (¥37.3 trillion). This can be broken down as follows: long-term liabilities from government loans and private bank borrowings, \$195.4 billion (¥25.4 trillion); liabilities accruing from capital costs of the Japan Railway Construction Public Corporation (JRCPC) and the Honshu-Shikoku Bridge Authority, \$40.0 billion (¥5.2 trillion); and liabilities accruing from pension and other obligations, \$37.7 billion (¥4.9 trillion). The new companies (including the Shinkansen Holding Corporation but excluding the three island companies) will take on \$87.7 billion (¥11.4 trillion) of this total debt. It is thought that this much of the debt can be shouldered by these companies without impairing their operations as long as efficient management is maintained. The remaining \$199.2 billion (¥25.9 trillion) is to be born by the JNR Settlement Corporation.
- (b) Of the \$87.7 billion (¥11.4 trillion) debt taken on by the new companies, the three Honshu passenger railway companies and the Freight Railway Company (including communications and information companies) will assume \$43.9 billion (¥5.7 trillion), while the Shinkansen Holding Corporation will assume \$43.8 billion (¥5.7 trillion). The latter will take over the capital of the Shinkansen (Bullet Train line) on the basis of its reacquisition value. It will also assume the corresponding liabilities, which will be determined by the book value of Shinkansen Capital. The Shinkansen Holding Corporation will have a debt of \$21.5 billion (¥2.8 trillion) (the difference between the procurement value and the book value), payable to the JNR Settlement Corporation.
- (c) The \$199.2 billion (¥25.9 trillion) in liabilities assumed by the JNR Settlement Corporation will be repaid from the proceeds of land sales, revenues received from the Shinkansen Holding Corporation, and the sale of stock in the new companies. The remaining approximately \$128.4 billion (¥16.7 trillion) will be born by the general budget account.

3.30 The privatization and division of JNR was actually a corporate reorganization. Had JNR been a private company, a portion of its overall debt would have been written off entirely. There are two reasons why the entire JNR debt was passed on to the newly-created companies: first, both JNR and its creditors assumed that all long-term liabilities would eventually be repaid by the Government; second, the services that JNR provided were indispensable to the Japanese public.

Table III-2 Estimate for Passenger Railway Companies Operation in FY1987

(US\$ millions)

	Hokkaido	East Japan	Central Japan	West Japan	Shikoku	Kyushu	Total
Operating Revenues	668	10,653	5,996	5,425	237	831	23,811
Operating Expenditure	977	8,955	5,644	4,874	328	1,028	21,807
Personnel	575	3,315	988	2,040	187	594	7,699
Non-Personnel	271	3,896	4,192	2,132	88	271	10,851
(Lease on Shinkansen lines)	(-)	(1,522)	(3,120)	(794)	(-)	(-)	(5,436)
Taxes	17	165	39	84	4	18	326
Depreciation, etc.	114	1,579	425	618	49	145	2,931
Operating Profit/Loss	-309	1,698	352	551	-91	-197	2,004
Interest Received	281		-	-	93	205	579
Interest Paid	-		292	496	-	-	2,380
Current Profit/Loss	-28	106	60	55	2	8	203
Extraordinary Profits	35	-	-	-	0	-	35
Net Profit/Loss	7	106	60	55	2	8	238

Note: Figures include activities in all sectors, including railways, buses, ships and related businesses.

Source: Supervisory Committee for JNR Reconstruction

Table III-3 Amount of Long-Term Liabilities at the Beginning of FY1987

1. JNR's long-term liabilities	\$195.4 billion
2. Pensions Liabilities ¹⁾	37.7
(Additional expenses for JNR Mutual Pension Fund)	(36.1)
(Grants for JNR Mutual Pension Fund)	(0.8)
(Pension Obligations)	(0.8)
3. Three Island Companies Fund ²⁾	6.9
4. Funds of the JNR Settlement Corporation in order to reduce excess personnel	6.9
5. Capital outlays for facilities constructed by the Japan Railway Construction Public Corporation (JRCPC) ³⁾	35.4
(Joetsu Shinkansen line)	(14.6)
(Facilities constructed by the JRCPC for use by the three Honshu passenger railway companies and the Japan Freight Railway Company)	(8.5)
(Other construction by the JRCPC)	(12.3)
6. Capital outlays for facilities constructed by the Honshu-Shikoku Bridge Authority	4.6
Honshu-Shikoku railroad bridge (Kojima-Sakaide route)	(4.4)
Honshu-Shikoku railroad bridge (Kobe-Naruto route)	(0.2)
Total	\$286.9 billion

Notes: 1) Figures for "Additional expenses for JNR Mutual Pension Fund" and "Pension obligation" are based on Net Present Value (NPV) on a predicted interest rate of 7.5%.

2) In addition to this amount, this Fund owes the monetary equivalent of the land owned by the three island companies, or \$0.7 billion, for a total of \$7.7 billion.

3) Capital outlays for construction not completed by the beginning of FY1987 include expected costs for completion.

Source: Supervisory Committee for JNR Reconstruction

3.31 The Supervisory Committee's report outlined above was ratified without modification by the Cabinet as the "Basic Policy on JNR Restructuring" in October 1985, thus becoming an official government proposal. Subsequently, the government began to work on drafting concrete legislation for the implementation of privatization and division in April 1987.*

C. Sequencing

C1. Building a Consensus for Privatization and Division

(History behind arguments for privatization and division)

3.32 Until 1905, when the railways were nationalized, 68% of the track length in Japan, or 5,231 km, had been constructed by private railway companies. The companies that had constructed the trunk lines had been provided generous government protection. In the first 40 years after the Meiji Restoration of 1868 (which marked the beginning of Japan's effort to become a modern industrialized nation), a very large portion of the country's railway network was built by private companies. Throughout the history of the industry, private operation of the railways was advocated on only two occasions. The first occurred in the Meiji period when the railways were first being built, and the second immediately after the establishment of JNR.

3.33 The first call for privatization in the beginning of this century was rejected by the government and the military, which placed primary importance on the railway's strategic significance for Japan's economic development and military security. Similarly, those who advocated the privatization and division of JNR immediately after its establishment were not taken seriously. The railways at the time had a monopoly on land transport, JNR was operating smoothly, and thus there seemed little need for privatization. Although the theoretical advantages of privatization and division were generally recognized, no practical need existed to carry out the reform.

(Debate within JNR)

3.34 In 1964, however, as JNR began to suffer from an unfavorable balance of payments and its business results did not improve, its managerial structure became an issue. In fact, JNR's financial crisis continued to worsen despite attempts to decentralize management and the implementation of a series of restructuring plans after 1969. JNR never formally concluded that managerial restructuring was impossible as long as JNR remained a single nationwide public corporation or that privatization and division would eventually become imperative. However, as the crisis deepened, a minority group within JNR began to make such an argument. This group eventually played an important role when the time came to study the matter seriously.

* It should be noted that the figures for excess personnel and long-term liabilities presented in the Supervisory Committee's report were projections made in July 1985 and are slightly different from actual April 1987 figures.

C2. Government Authorization of Privatization

3.35 The Suzuki Cabinet, which was appointed in 1980, formulated sweeping administrative reform policies in an attempt to solve the pressing government deficit. As a result, the Provisional Committee on Administrative Reform was launched in 1981. Its chairman, who was highly influential in business circles, was keenly interested in solving the JNR problem.

3.36 At the time, JNR had just begun implementing its own final restructuring plan and did not wish to cooperate with the Committee's investigation. However, the investigation made headway when the Committee gained the unofficial cooperation of certain JNR officers who believed that radical reform was essential. In the end, the Committee concluded that the privatization and division of JNR were necessary.

3.37 Having established a special committee to study JNR's financial problems, the LDP eventually acknowledged that JNR was bankrupt and concluded that privatization and division were necessary, despite appeals by JNR to maintain the status quo.

3.38 Ultimately, the Provisional Committee succeeded in overcoming the resistance of one segment of the LDP, all of the opposition parties, JNR itself, and other interest groups. It recommended to the Government in 1982 the privatization and division of JNR. In 1983, the Supervisory Committee for JNR Reconstruction was established in order to implement this recommendation. In 1985, after two years of further study, the privatization and division of JNR became official government policy.

(Political Conditions in the 1980s)

3.39 As a result of the general elections held in June 1980, the LDP held 286 of the 511 seats in the Diet's House of Representatives. This made it easy to pass the legislation required to establish the Provisional and Supervisory Committees.

3.40 Yasuhiro Nakasone, who became Prime Minister in November 1982, announced that he would continue the process of JNR restructuring begun by the Suzuki Cabinet, in which he had served as a minister in charge of Administrative Reform. JNR, still against privatization and division, attempted to rely on the influence of the most powerful LDP member at that time, former Prime Minister Kakuei Tanaka. That attempt failed, however, because Tanaka fell ill in February 1985. In June 1985, Nakasone overcame the opposition decisively by dismissing JNR's governor, who was against restructuring.

3.41 Because JNR was a state-owned enterprise, many laws had to be either enacted or revised before privatization and division could be implemented. In the 1983 election, the LDP lost some of its seats in the House of Representatives, maintaining 258 of the 511 seats. In the election held in 1986, however, Nakasone won a solid victory by promising that JNR restructuring would continue, and the number of LDP seats rebounded to 304. As a result, all legislation concerning the restructuring of JNR was passed by the Diet in FY1986.

3.42 The Japanese press, which got its start as an anti-government force during the Meiji Period, remained critical of the conservative government party after World War II and was, in general, sympathetic to reformist parties. For this reason, it sided with the unions in their position on the JNR issue. Naturally, the unions opposed restructuring on the grounds that jobs would be lost. The unions representing JNR employees were strongly influenced by Marxism, and because they considered their movement as part of a political movement, they became more radical. The JNR management, however, was unable to

formulate an effective strategy against the unions, not only because they had no authority to set wages and other labor conditions, but also because they had little conception of themselves as business managers. As a result, workplace discipline deteriorated in the early 1970s and a succession of accidents and illegal strikes commenced. As these management-labor difficulties became more visible in the context of the huge deficit JNR was running, the public no longer had confidence in JNR. The press made scathing attacks on JNR, leaving readers with the impression that JNR restructuring was essential. This also helped to pave the way for the privatization and break up of the corporation.

C3. Factors Promoting and Hindering the Privatization and Division of JNR

3.43 Looking at the sequence of events leading to the privatization and division of JNR, one can extract several factors that either promoted or hindered the process.

(Factors That Promoted Privatization and Division)

3.44 The factors in this category were indispensable to the process of restructuring, and can be divided into two subgroups: 1) basic factors, the conditions which made restructuring absolutely necessary, and 2) contingent factors, whose accidental but timely arrival served to help the privatization process.

3.45 Basic factors include the financial crisis confronting the government and the insolvency of JNR. The former was the key factor behind the government's decision to reform JNR. The latter included an incredibly large accumulated debt and fiscal drain resulting from the need to cover that debt with subsidies. The latter also resulted in the disruption of workplace discipline, which in turn led to a general decline in the quality of transport services, illegal strikes and accidents. These phenomena made the Government, the LDP, and the general public keenly aware of the necessity for JNR restructuring.

3.46 The following can be cited as factors which helped the restructuring process:

- (a)** The dominance of the ruling LDP in the Diet
- (b)** The strong leadership of Prime Minister Nakasone
- (c)** The strategy of establishing the Provisional Committee and the Supervisory Committee as neutral and independent organizations
- (d)** The existence of a pro-reform group within JNR
- (e)** The media's shift to a pro-reform stance
- (f)** The existence of an entrepreneurial spirit represented by the advocacy of railway privatization since the Meiji Period
- (g)** Public hatred of inefficient public enterprises which seemed to believe that "the government will take care of everything."

3.47 It must be noted that symbolic and charismatic characters and careers of the two leading Provisionary Committee members strengthened the status and the public image of the Provisionary Committee as independent and impartial. One leader is Toshio Doko, the Chairman of the Committee, who, in spite of his brilliant record as a first class business leader, was known as a man of extremely humble lifestyle. For him, according to the public perception, luxury was an enemy to the nation and to the coming generations. Ryuzo Sejima, another member and an advisor to Mr. Doko, had a legendary career which even sophisticated politicians had to respect. As a young military elite he participated in the strategy formation of the War in the early 1940s, was captured by the Soviet Army after the War and was put to hard labor in Siberia, joined one of the biggest trading companies after returning to Japan in 1956, and became the chairman of that company. These people were perceived by the public who were suspicious by now of the self-profiting motivations of interest groups as men entirely devoid of selfish motivations.

(Factors That Hindered Privatization and Division)

3.48 The following factors can be cited as having hindered the restructuring process:

- (a) JNR management
- (b) Anti-reformists within the LDP
- (c) JNR unions
- (d) Opposition parties supported by JNR unions

3.49 In summary, the privatization and division of JNR proceeded due to, in part, the insolvency of both the Government and JNR. The Provisional Committee on Administrative Reform, the Supervisory Committee for JNR Reconstruction, and reformists in JNR convinced the Government of the need for reform while the Government in turn convinced the people of that need. Their efforts created a favorable political environment for reform and neutralized the opposition.

IV. ISSUES IN THE IMPLEMENTATION OF PRIVATIZATION

A. Prior Restructuring

A1. Separation of Loss-Making Departments

4.1 In April 1987, the privatization and break-up of JNR were carried out virtually in line with the recommendations outlined in the report by the Supervisory Committee for JNR Reconstruction. The following measures were taken at that time to ensure that the new companies had a stable revenue base and to guarantee the smooth implementation of privatization: the separation of unprofitable operations from the new companies; the correction of major profit differentials among them; and the establishment of measures to help them achieve as early as possible the listing standards required to sell their shares publicly, the ultimate target of privatization.

- (a) The unprofitable freight division was separated from the passenger division.
- (b) The conversion of remote transportation routes to bus lines was expedited.
- (c) The Shinkansen Holding Corporation (a government organization) was established to correct the profit disparity between the Tohoku and Joetsu Shinkansen lines, which were still suffering from heavy initial investment burdens, and the Tokaido and Sanyo Shinkansen lines, whose financial burdens were lighter.
- (d) A fund was created for the Three Passenger Railway Companies located in Hokkaido, Shikoku, and Kyushu, which were still experiencing an unstable balance in revenues and expenditures even after the break-up of JNR. The JNR Settlement Corporation provided the capital for this fund.

(Japan Freight Railway Company)

4.2 The freight operations became a separate and independent entity, borrowing the trunk line sections of the passenger railway companies and operating a single nationwide freight transport business. (This meant that the company no longer needed track maintenance personnel and was therefore able to operate at reduced cost.)

(Shinkansen Holding Corporation)

4.3 The Shinkansen Holding Corporation was given ownership of all of the facilities of the Shinkansen lines (the ground facilities of the Tohoku, Joetsu, Tokaido, and Sanyo lines, exclusive of passenger cars) and rents them to the passenger railway companies. Unlike the passenger railway companies and the freight railway company which operate as joint-stock companies, this Corporation is a government agency, as is the JNR Settlement Corporation.

4.4 The Shinkansen Holding Corporation (SHC) inherited a debt of \$43.5 billion (¥5.7 trillion) from JNR, equivalent to the book value of Shinkansen assets. This debt is being repaid with funds generated by rentals to the three passenger railway companies on Honshu (the main island). The Shinkansen Holding Corporation also owes a long-term debt of \$22.2 billion (¥2.9 trillion) to the JNR Settlement Corporation at an annual interest rate of 7.05% with a repayment period of 30 years. This additional debt equals the difference between the replacement cost of the Shinkansen lines and their book value. Thus, the total financial burden of the SHC for replacement costs is \$65.7 billion (¥8.6 trillion). While the track rental obligations of the three Honshu (mainland) passenger railway companies

vary, the three companies will purchase Shinkansen assets pro rata over a 30-year period. In other words, the debts of the SHC will be redeemed by rents corresponding to the actual cost of replacing the Shinkansen facilities, plus a fee for the transfer of Shinkansen assets. (The transfer is to be regulated independently by separate legislation to be enacted when the rental period ends, with the possibility that this amount will become nil.)

(Management Stabilizing Fund)

4.5 Management Stabilizing Funds for the JRs in Hokkaido, Shikoku, and Kyushu totaling about \$10 billion (¥1.3 trillion) have been established and the profit arising from management of the funds will be used to supplement their revenues.

4.6 In short, the JNR Settlement Corporation provided \$10 billion (¥1.3 trillion) in the form of debt owed to the three inland companies with a redemption period of 10 years (including a two-year grace period) at an annual interest rate of 7.3% and distributed the following amounts to each of the three island companies: Hokkaido--\$5.3 billion (¥682.2 billion); Shikoku--\$1.6 billion (¥208.2 billion); Kyushu--\$3.0 billion (¥387.7 billion). Interest accrued from these funds will be used to supplement the revenues of the three corporations.

4.7 The idea of providing government subsidies to make up for the annual losses experienced by the three island companies was considered but later abandoned on the grounds that it would limit the independence of each of the three companies and obscure managerial responsibility. Similarly, the idea of supplementing and adjusting profits among the newly established corporations was considered, but it was decided that this might result in the creation of funds that have no countervalue and thus require alterations in the existing tax system. For these reasons, the special methodology described above was chosen.

A2. Separation of Long-Term Liabilities Outstanding

4.8 Long-term liabilities, including those outstanding at the beginning of FY1987 and those expected to arise subsequently, included the following: JNR debts of \$192.3 billion (¥25 trillion); pension liabilities (e.g., additional expenses for the Mutual Pension Fund and ordinary pension funds) of \$38.5 billion (¥5.0 trillion); Management Stabilizing Funds for the three island companies amounting to \$10 billion (¥1.3 trillion); an excessive personnel countermeasures fund of \$5.4 billion (¥0.7 trillion); and capital expenses of \$40 billion (¥5.2 trillion) for facilities of the Japan Railway Construction Public Corporation and the Honshu-Shikoku Bridge Authority. These liabilities totaled \$286.2 billion (¥37.2 trillion).

4.9 Liabilities may be categorized as follows, according to debtor (Chart IV-1):

- (a) JRs bear liabilities of \$45.8 billion (¥5.9 trillion). These liabilities have been assumed by the JRs on the premise that they will institute maximum efficiency in management and balance their accounts in the immediate future. This amount was thought to be the maximum they could bear and remain profitable. (The three island companies have been exempted from this financial burden.)

Obligations of JRs (\$45.8 billion):

Present—\$36.8 billion

Future—\$ 9.0 billion

Note: Future obligations refer to the total rentals that JRs owe to the Japan Railway Construction Public Corporation (JRCPC) for use of its facilities on the mainland.

- (b) The Shinkansen Holding Corporation assumed obligations amounting to the book value of Shinkansen assets, or, \$43.5 billion (¥5.7 trillion).

Obligation of the SHC (\$43.5 million):

Present—\$29.1 billion

Debt taken over from JRCPC—\$14.4 billion

Note: The JRCPC's \$14.4 billion debt represents the cost of capital investment of the Joetsu Shinkansen.

The SHC has since assumed obligations to the JNR Settlement Corporation of \$22.2 billion (¥2.9 trillion).

In short, the total obligations of the JRs amounted to \$111.5 billion (¥14.5 trillion) and consisted of debts assumed by JRs and the Shinkansen Holding Corporation.

- (c) The remaining \$196.9 billion (¥25.6 trillion) liabilities were assumed by the JNR Settlement Corporation, established as the successor to the old JNR. The redemption of the debts assumed by the JNR Settlement Corporation was to be made with the following funds: reimbursements of \$22.2 billion (¥2.9 trillion) by the Shinkansen Holding Corporation; \$59.3 billion (¥7.7 trillion) from sales of the marketable pieces of JNR-owned real estate; and \$9.2 billion (¥1.2 trillion) from sales of JR stock. The remaining \$106.2 billion (¥13.8 trillion) was expected to be born by the general budget account.

4.10 The \$196.9 billion (¥25.6 trillion) liabilities assumed by the JNR Settlement Corporation included a future obligation of \$38.5 billion (¥5.0 trillion) earmarked for pension funds. These funds will be necessary to supplement shortages arising from the need to provide pensions for public personnel's pension period, for whom no annual reserve fund existed. This was the estimate of the total outlay required of the JNR Settlement Corporation after 1987.

A3. Streamlining of the Work Force

4.11 The report on JNR restructuring submitted to the Government by the Supervisory Committee in July 1985 estimated that there would be approximately 93,000 excess personnel after restructuring. This figure was calculated on the assumption that no new manpower would be hired. While JNR had a work force of about 276,000 in FY1987, the Committee determined that the new organization would require a work force of 183,000 employees (168,000 for the passenger railway companies and 15,000 for the freight company). The Committee outlined the following measures for dealing with the surplus manpower:

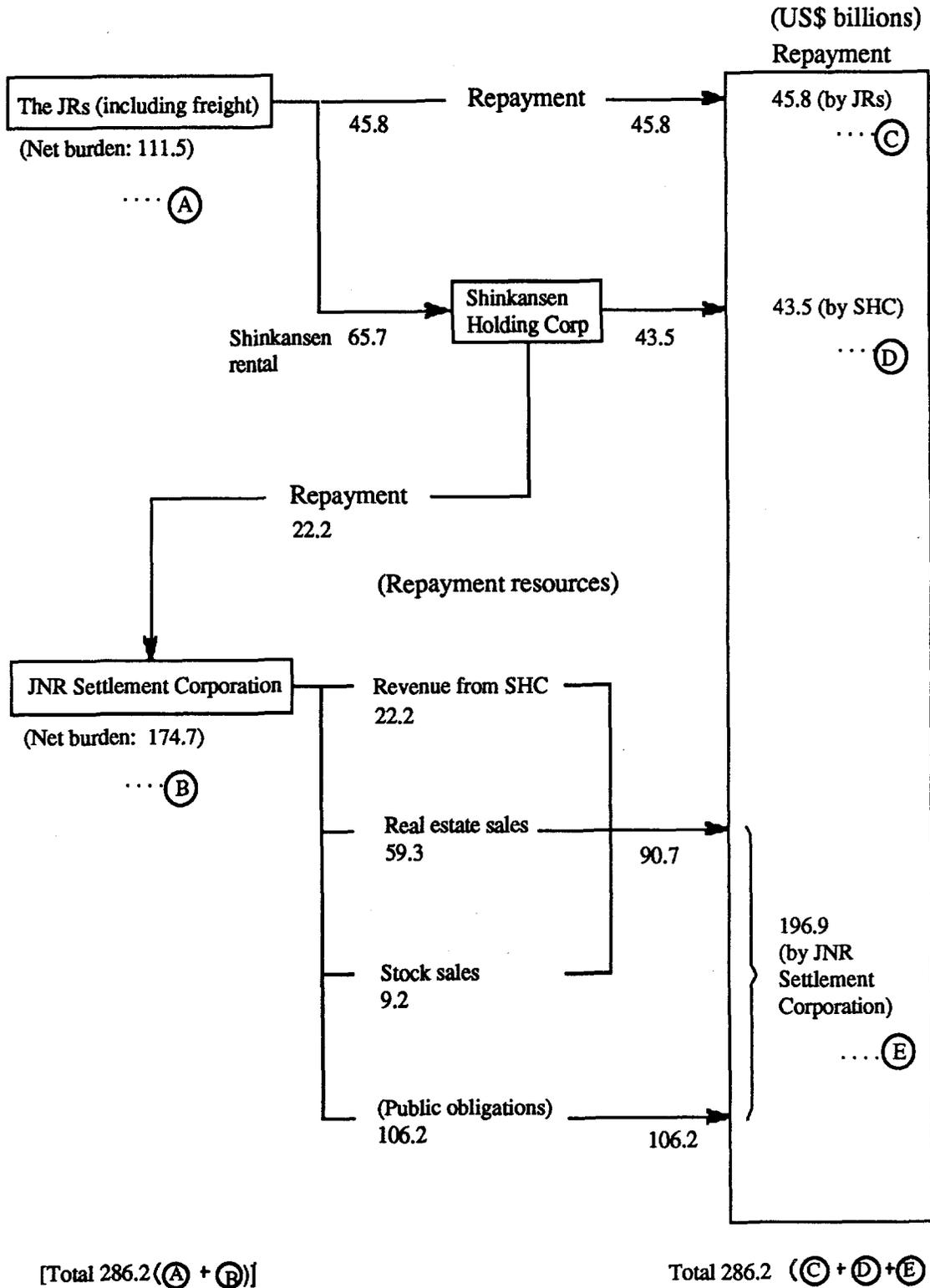
Table IV-1 Structure of JNR Long-Term Liabilities

(US\$ billions)

Long-Term Liabilities 242.3	JNR Long-Term Liabilities	192.3
	JRCPC Liabilities	34.6
	Honshu-Shikoku Bridge Authority	5.4
	Management Stabilizing Fund	10.0
Other Liabilities 43.9	Pension Liabilities	38.5
	Reemployment Promotion Expenses	2.3
	Others	3.1
Total		286.2

JRCPC: Japan Railway Construction Public Corporation

Chart IV-1 Long-Term Liabilities and Funding Resources (based on April 1987 figures)



- (a) Establishing a special allowance for voluntary retirement, aiming for a reduction of about 20,000 employees.
- (b) Transferring about 20% (32,000) of the appropriate number of passenger railway companies' personnel from the JNR to the new companies.
- (c) Assigning the remaining 41,000 employees to the JNR Settlement Corporation. Measures would be taken to help these employees be reemployed within three years.

4.12 The Government decided to seek cooperation from the public sector, including JNR-related enterprises, state and local governments, and industry as a whole in the reemployment of former JNR personnel. The government also requested for a measure that certain proportion of their new recruitment be reemployment from JNR in the public sector.

B. Employee Issues

B1. Reduction of Redundant Work Force and Alleviation of Social Costs

(Early Retirement)

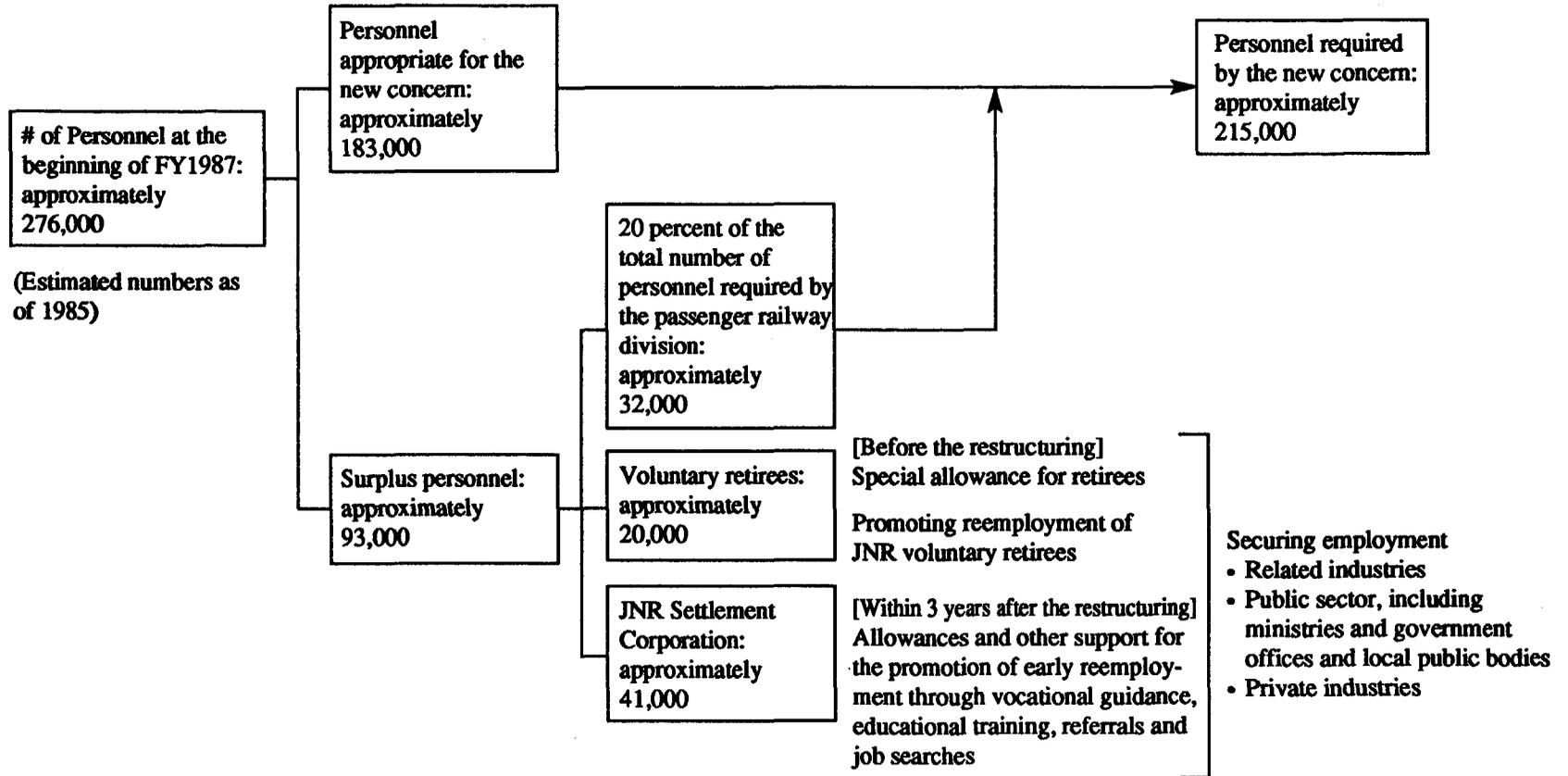
4.13 In Japan, employment adjustment necessitated by such temporary factors as business fluctuations is carried out by reassigning the worker within the organization. Only in extraordinary cases, such as the closure of a division, is voluntary retirement recommended for middle-aged or older employees, who are usually paid more than younger employees. Because the privatization and division of the JNR were radical restructuring efforts, the reduction of personnel was carried out by encouraging early retirement.

4.14 A special law was enacted to provide a special allowance (10 months of standard wages) to those who offered to resign in FY1986. This allowance was provided in addition to usual severance pay. Employees excluded from this measure were those under 55 years of age, those seeking long-term leave on the premise of retirement, those requesting retirement for personal reasons, and those keeping their status as national civil servants after retirement. If a retiree who had received the special allowance became a national civil servant within a year, he or she had to reimburse the allowance.

4.15 Funds for the special allowance were obtained through the issuance of government-guaranteed bonds, underwritten by the Trust Fund Bureau of the Ministry of Finance.

4.16 The number of retirees in FY1985 was 48,000, greatly exceeding the annual average of 27,000 for the preceding five years. The number is particularly high because the Mutual Pension system was revised that year. The amount of pension was computed on the basis of a pensioner's final wages, so that the abolition in 1985 of the special wage raise system at the time of retirement made retirement within FY1985 more advantageous in terms of the amount of pension a JNR employee would receive. The figure for FY1986 rose to 53,000 because that year the voluntary retirement system was implemented in preparation for the JNR privatization and division. The total number of JNR employees as of the end of FY1986 was about 224,000. When the JNR was restructured, there were only about 40,000 surplus employees. This was far below the number forecasted because 40,000 more employees retired than had been expected, due to the above-mentioned reasons. (Figure IV-1).

Chart IV-2 Outline of JNR Surplus Personnel Measures (The Supervisory Committee for JNR Reconstruction)



(Change of Jobs)

4.17 In response to recommendations by the Supervisory Committee for JNR Reconstruction, in August 1985 the Government established a Surplus Personnel Reemployment Measures Headquarters and also enacted a special law for the promotion of reemployment which requested active cooperation from various national sectors.

4.18 A summary of the Government's reemployment policy is provided below.

- (a) The ministries and government agencies were asked to employ 10% of their total recruits for FY1986 from among JNR voluntary retirees. These public agencies were to make efforts to do the same in FY1987.
- (b) The Ministry of Home Affairs asked local governments to actively employ JNR voluntary retirees according to the preceding measures.
- (c) The Ministry of Labor requested leading economic organizations and various business groups to cooperate in promoting reemployment of JNR voluntary retirees.

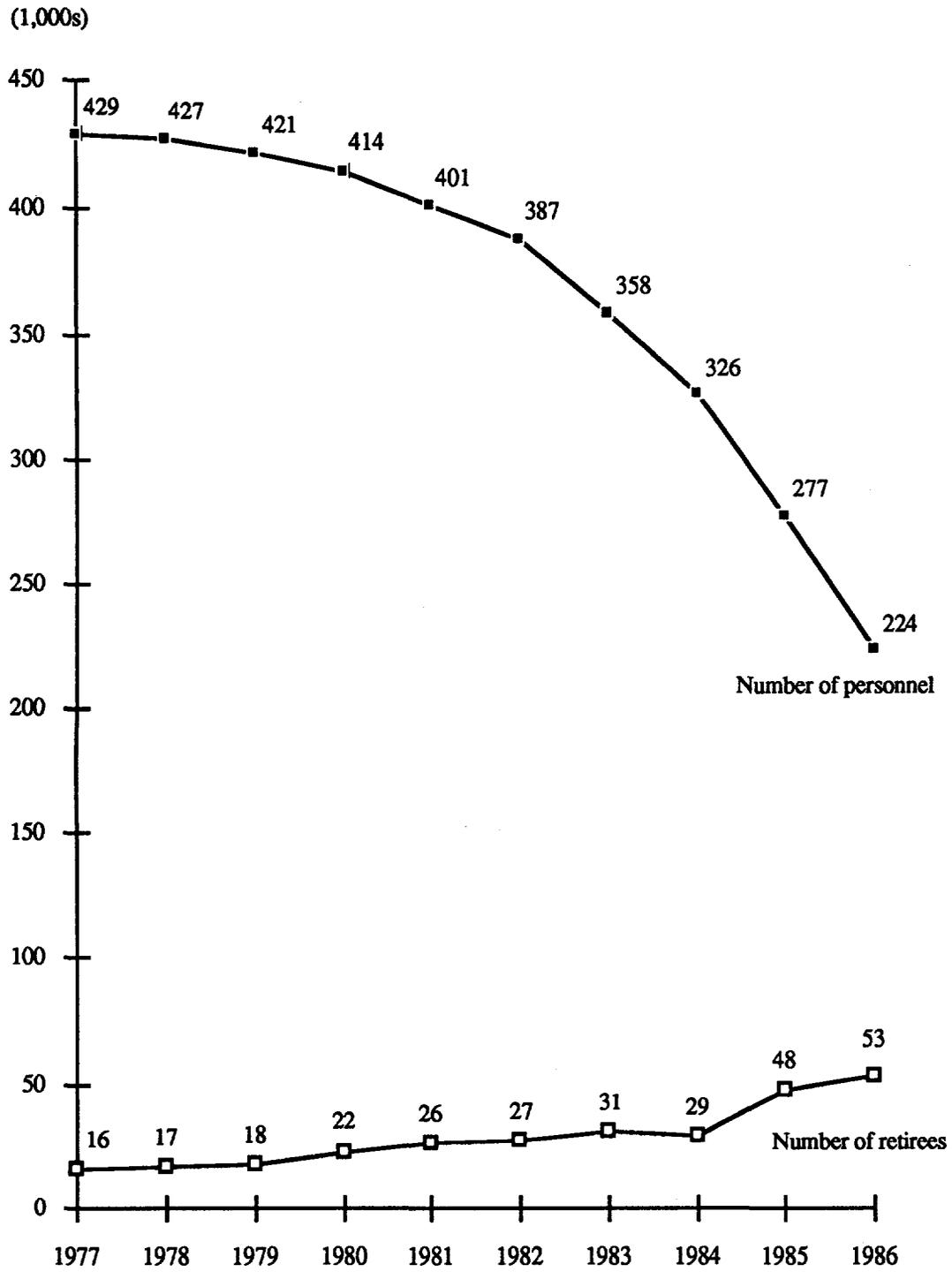
4.19 Partly because of these requests and partly because of a shortage of manpower resulting from economic expansion, reemployment was carried out far more smoothly than anticipated.

- (a) In the public sector, prefectural and municipal governments, government corporations, and government-funded corporations, including NTT, hired JNR voluntary retirees. This was done without increasing their regular manpower quotas.
- (b) In private industry, private railway companies hired the greatest number of former JNR workers, as expected. Truck transport companies and construction companies, which had suffered severe manpower shortages, and public utilities companies also actively responded to the Government requests.
- (c) In transportation-related industries, large travel agencies, hotels, and companies operating shopping centers in the station buildings, all of which had enjoyed close relations with JNR, also hired large numbers of former JNR workers.

4.20 Of the 277,020 workers employed by JNR as of April 1986, those who found new jobs by April 1, 1987 were in the following sectors:

Public sector	7,320
Industries	12,400
Related industries	10,450
<u>Self-employed</u>	<u>16,240</u>
Subtotal	46,410
General retirees	6,300
JR passenger companies	187,200
JR freight company	12,000
<u>Other JR companies</u>	<u>1,450</u>
<u>Subtotal</u>	<u>206,950</u>
TOTAL	253,360

Figure IV-1 Changes in Number of Personnel & Retirees



Source: Transportation and the Economy, October 1988

4.21 As a result, the total number of JNR employees ultimately transferred to the JNR Settlement Corporation was 23,660. A total of 2,510 of these employees were regular employees of the Corporation, and 21,150 needed reemployment. Of these, 20,100 retired in order to seek reemployment by the end of the effective period of the special law (April 1, 1990), thus successfully solving the surplus manpower problem. A total of 1,050 employees were ultimately dismissed because they refused to move to newly allotted placements. During the period in which the special law was in effect, the Corporation gave those who sought reemployment special vocational training. (See Chart IV-3)

(Pension Liabilities)

4.22 The JNR Mutual Pension Association had suffered from constant deficits each year since 1975. Thus, in 1984 the system of indexation of pensions was suspended. However, the financial condition of the pension system was expected to be further aggravated by the reduction in the number of employees resulting from privatization and the resulting increase in the number of beneficiaries.

Estimated numbers of members and pensioners

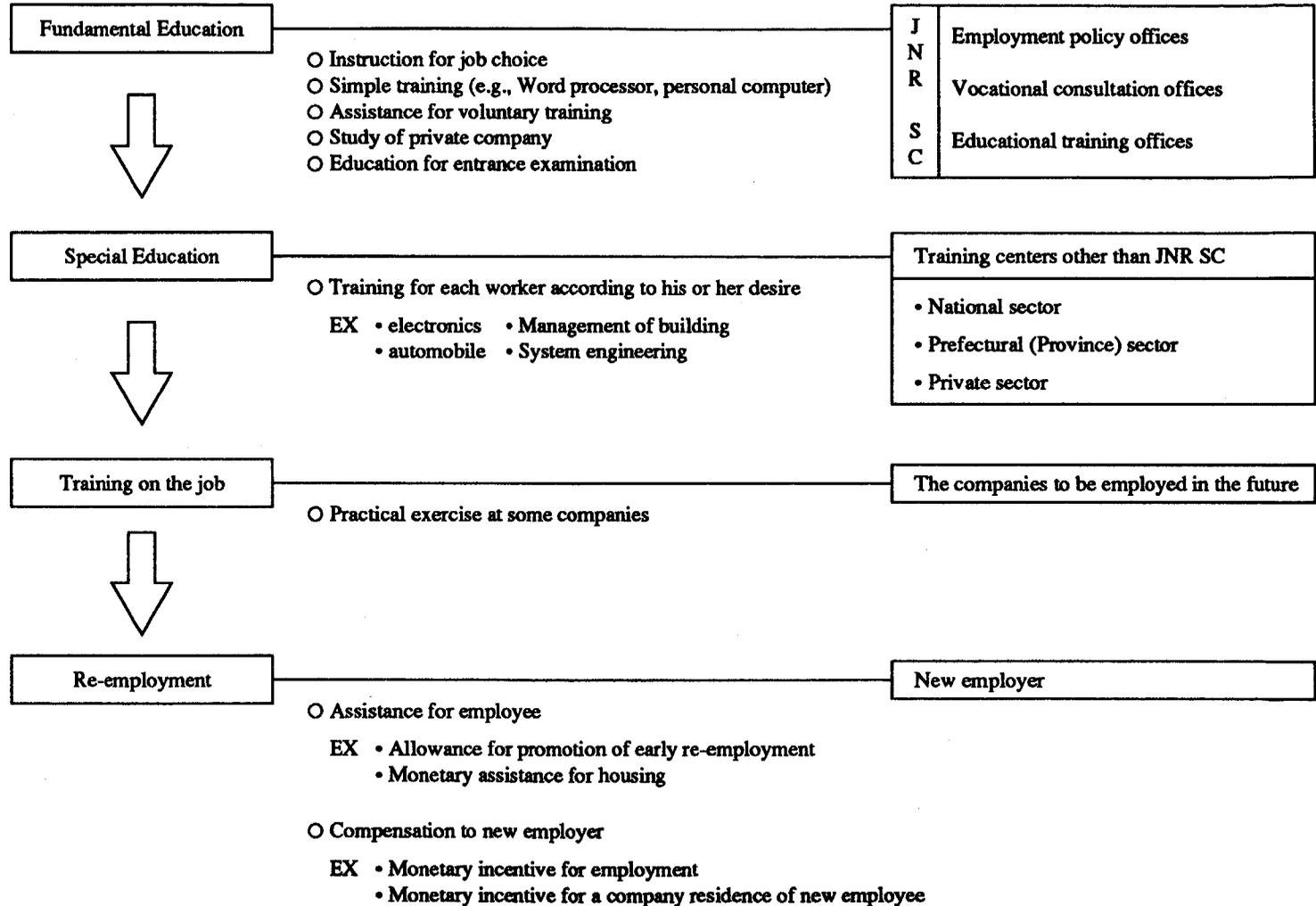
	The end of FY1985	The end of FY1987
Members	280,000	220,000 (60,000 less)
Pensioners	440,000	470,000 (30,000 more)

4.23 Revenue for FY1985 was about \$5.7 billion (¥740 billion), while expenditures amounted to about \$5.8 billion (¥760 billion). This meant a revenue shortage of about \$154 million (¥20 billion). It was expected that the reserve fund would be exhausted by the end of FY1987. Of the above-mentioned revenue, about 85%, or \$4.8 billion (¥630 billion), was provided by JNR. Most of this amount included additional expenses (extra pension payments accruing from the period prior to the introduction of the existing mutual aid pension system). All of these expenses were financed by JNR and were assumed by the JNR Settlement Corporation after reform.

4.24 After August 1986, a study of the pension problem was launched by a council comprised of four state ministers, namely the Minister of Finance, Minister of Transport, Minister of Health and Welfare, and the Chief Cabinet Secretary. The council was known as the Cabinet Members' Discussion Group on the Japanese Railway Mutual Pension Problem. This group decided in March 1987 that until fiscal 1989, when the five-year financial adjustment (government support) period was to end, a portion of the additional expenses assumed by the JNR Settlement Corporation would be partially cut. The group also decided that the mutual pension system's reserve funds were to be used in paying benefits. It was also agreed that financial adjustments or supports would be carried out with funds provided by the three mutual pension systems--namely, those for the state civil servants, the Japan Tobacco Inc., and Nippon Telegraph and Telephone Corporation (NTT). This was done in order to ensure the payment of benefits to pensioners.

4.25 A large annual revenue shortfall of about \$2.3 billion (¥300 billion) was anticipated annually after 1990, so a subsidy of \$3.4 billion (¥442 billion) for the JNR Settlement Corporation was included in the FY1989 supplementary budget. In addition, the Pension Law was partially revised so that the following measures could be taken beginning in 1990: fiscal support by the welfare pension plan, a partial cut in pension payments, higher insurance premiums, and special financial burdens undertaken by the JR's and the JNR

Chart IV-3 JNR Settlement Corporation Education System for Re-Employment



Settlement Corporation. As shown in Chart IV-4, however, because the welfare pension plan carries a heavier burden than the JRs, it is possible that the readjustment issue may resurface as the financial condition of the JRs improves in the years ahead.

B2. Labor Union Problems

4.26 It is thought that despite the financial deterioration of the JNR, rationalization was not able to progress, nor productivity improve, partly because JNR failed to obtain the cooperation of the labor unions.

4.27 In the years before privatization and division, many JNR employees had been organized under the banners of the National Railway Workers' Union (NRWU which had about 70% of the organized employees as members), the National Motive Power Union (NMPU, which had about 10%), the Japan Railway Workers' Union (JRWU, which had about 10%), and the All-National Railways' Permanent Way and Construction Labor Union (ANRPWCLU, which had about 1%).

4.28 NRWU was affiliated with the General Council of Trade Unions of Japan (Sohyo) and served as the standard bearer of the Japanese workers' movement as a whole. Its basic stance was confrontation with the management.

4.29 NMPU, a functional trade union of engineers and train engineers, was, like NRWU, affiliated with the Japan Socialist Party and Sohyo. In the last stages of JNR restructuring, however, it revised its policy and consented to privatization. JRWU, which was about the same size as NMPU, was affiliated with the Democratic Socialist Party and Domei. Its basic policy was labor-management cooperation. In facing the JNR restructuring, JRWU favored privatization early on. Ultimately, the NMPU also came to support privatization. This resulted in a confrontation with the NRWU.

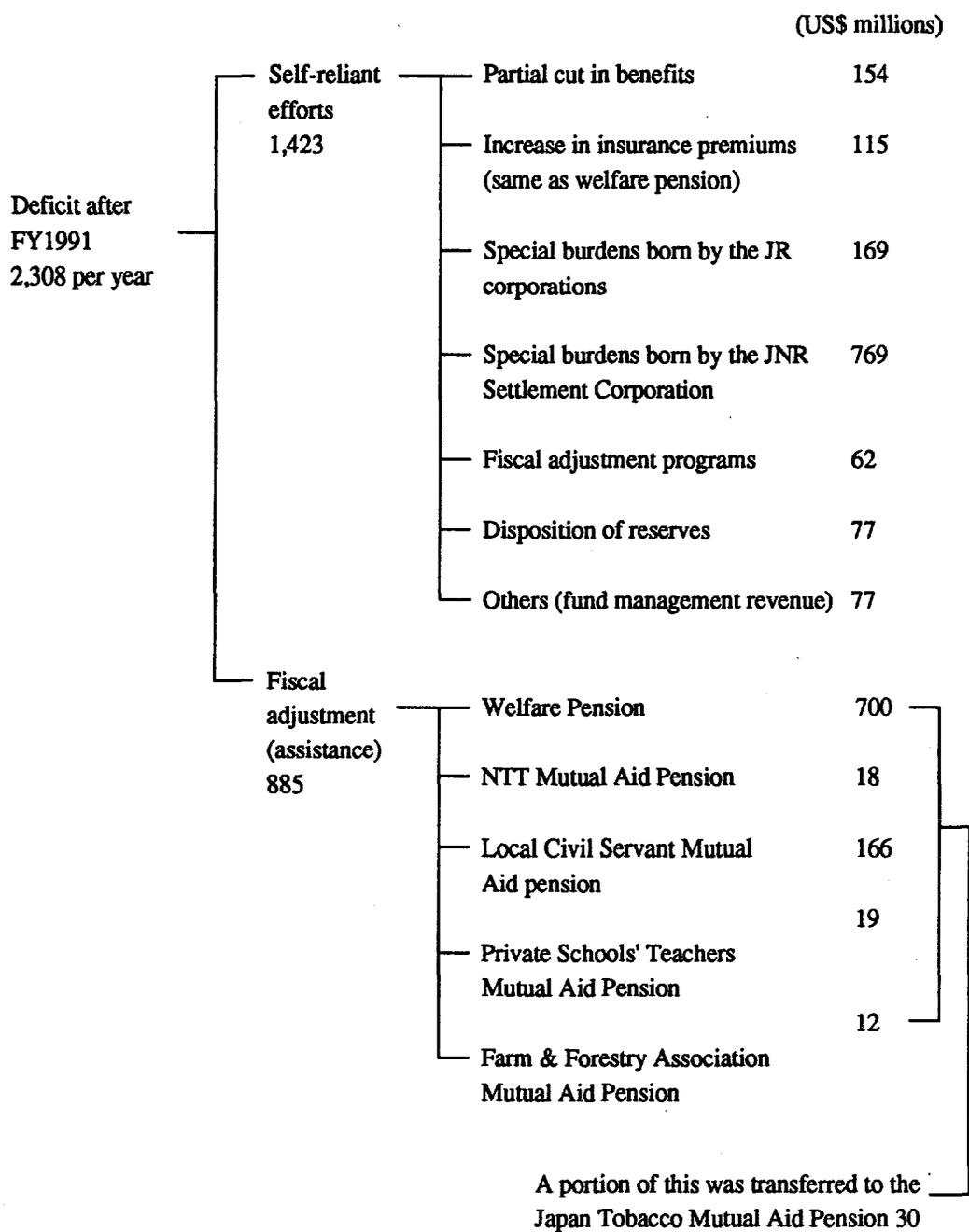
4.30 Under these circumstances, JNR cooperated with NMPU and JRWU by signing an employment stabilization agreement and a joint declaration between labor and management. But in its dealings with NRWU, JNR implemented a policy designed to reduce the importance of the labor union by virtually ending of its collective bargaining with NRWU. As a result, NMPU promised not to resort to strikes at the time of restructuring for privatization and, in cooperation with JRWU, the pro-management union, inaugurated the Japan Confederation of Railway Workers' Union (JR Soren), which had 135,000 members at its inception.

4.31 After restructuring for privatization, separate workers' unions were organized in the JR passenger companies and the Japan Freight Railway Co. with JR Soren as the upper body. These unions and the JRs signed joint declarations and established stable labor-management relationships.

4.32 When the JNR Settlement Corporation requested the passenger railway companies to recruit personnel from among those who had not been reemployed in March 1990, JR Central Japan and JR West Japan conformed to the request. However, JR Soren objected on the grounds that "to employ former NRWU members who had opposed JNR restructuring would contradict the spirit of the restructuring."

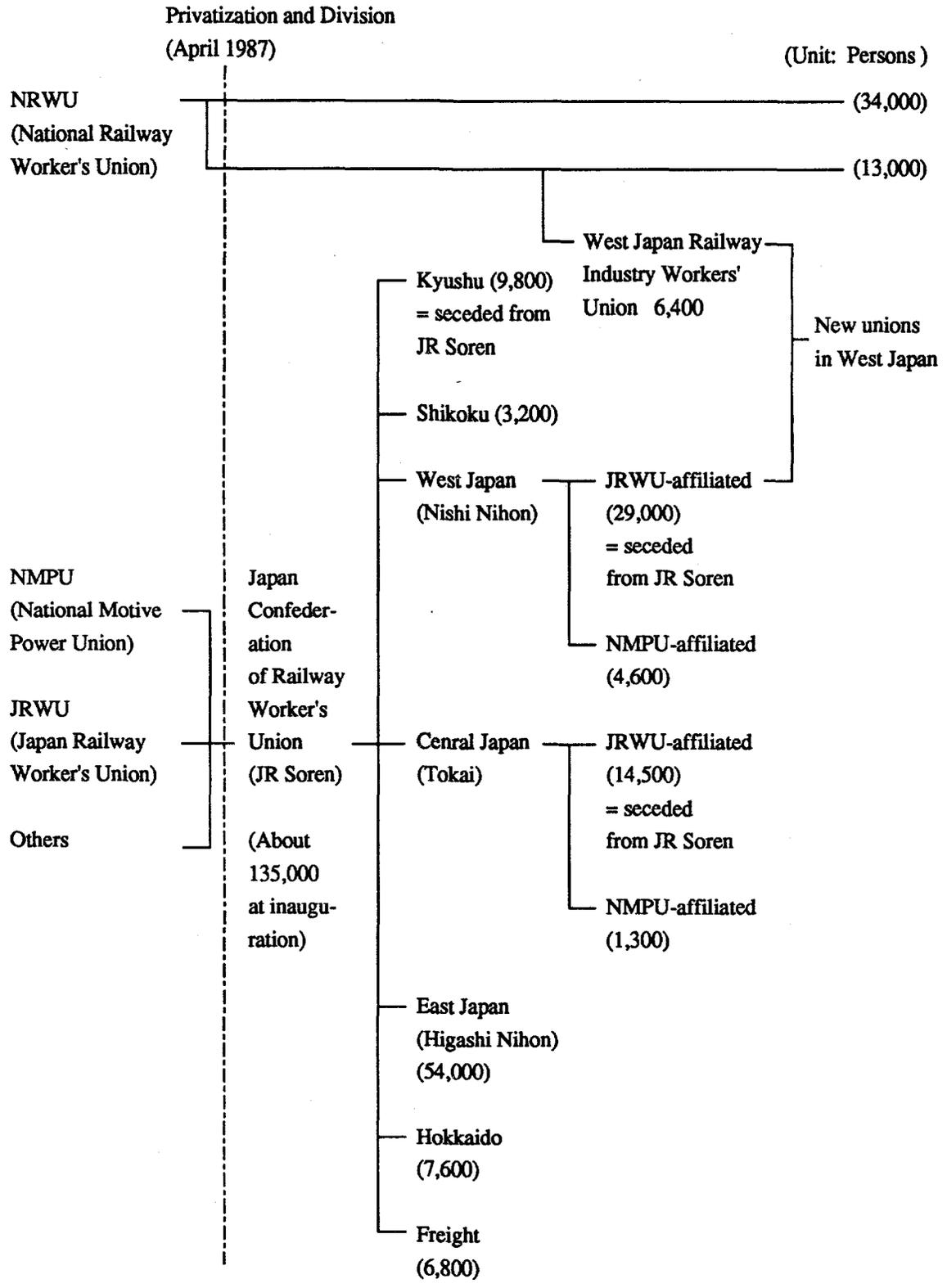
Chart IV-4 Finances of the Railway Mutual Pension Fund

Financial resources to cope with insufficient revenues for the Railway Mutual Pension Fund under the revised Pension Law (effective December 1989)



Source: Privatization Changes Japan, PHP Research Institute.

Chart IV-5 Changes in the Workers' Unions



4.33 By conforming to the request made by the JNR Settlement Corporation, JR Central Japan and JR West Japan brought to the surface the confrontation between their unions and JR Soren. During its general convention in June of that year, JR Soren sought from the unions of the various companies affirmation of the right to strike and the delegation of that right to itself. With this move, management became highly skeptical of JR Soren's intentions.

4.34 Accordingly, confrontation over management's rights emerged between East and West, between NMPU and JRWU, and between labor and management.

4.35 In July 1991, the West Japan union seceded from JR Soren, and the union of JR Central Japan followed suit in November. (The former NMPU-affiliated unions had already formed a new union.) At present, JR Soren controls company unions belonging to the JRs in East Japan, Shikoku, Hokkaido, and the JR Freight. The Shikoku union is also expected to secede from JR Soren, which raises the possibility of an ultimate division between JR Soren (and its 80,000 former NMPU-affiliated workers) in eastern Japan and an anti-JR Soren union (with about 50,000 former JRWU-affiliated workers) in western Japan.

C. Privatization and Division of JNR

C1. Legal and Institutional Arrangement

4.36 After it received the report by the Supervisory Committee entitled "Opinions on the Reform of JNR," the Government held the Cabinet Ministers' Conference on JNR Restructuring in July 1985. The Ministry of Transport also created the Headquarters for the Promotion of JNR Restructuring and set up a joint Liaison and Coordination Committee with JNR in August.

4.37 Eight bills related to JNR restructuring were submitted to the 104th National Diet but were shelved when the House of Representatives was dissolved in June 1986. Following the next election, these bills were resubmitted, passing the Lower House in October and the House of Councillors the following month. As a result, the principle of government management of Japan's railways, observed since the enactment in 1906 of the Railway Nationalization Law, was abandoned.

4.38 The basic structure of the laws is evident from their titles, such as the JNR Restructuring Law which defines the basics of restructuring. The six related laws detail how restructuring is to be carried out. The other law, the Railway Business Law, is a permanent law that regulates both JRs and private railways (formerly regulated by local railway law). This law also recognizes the new JRs as having basically the same status as private railway companies (Chart IV-6).

(JNR Restructuring Law)

4.39 This law stipulates the basic rules for radical restructuring, the purpose of which is to establish an efficient managerial structure. Details are as follows:

(a) **Privatization and Division**

- (i) **The Passenger railway business will be divided into six operations and will be carried out by corresponding corporations.**

- (ii) The Shinkansen Holding Corporation owns all Shinkansen facilities.
 - (iii) The single nationwide freight operation will be carried out by a stock company.
- (b) Redemption of Long-Term Liabilities
- (i) The long-term liabilities will be assumed by those corporations designated by law--namely, the passenger railway companies (excluding the three island companies), the Shinkansen Holding Corporation, the Freight Railway Company, a telecommunications corporation, etc..
 - (ii) After privatization and division, the JNR is to be reorganized as the JNR Settlement Corporation and will assume the remaining liabilities that are not assumed by the corporations named in item i.

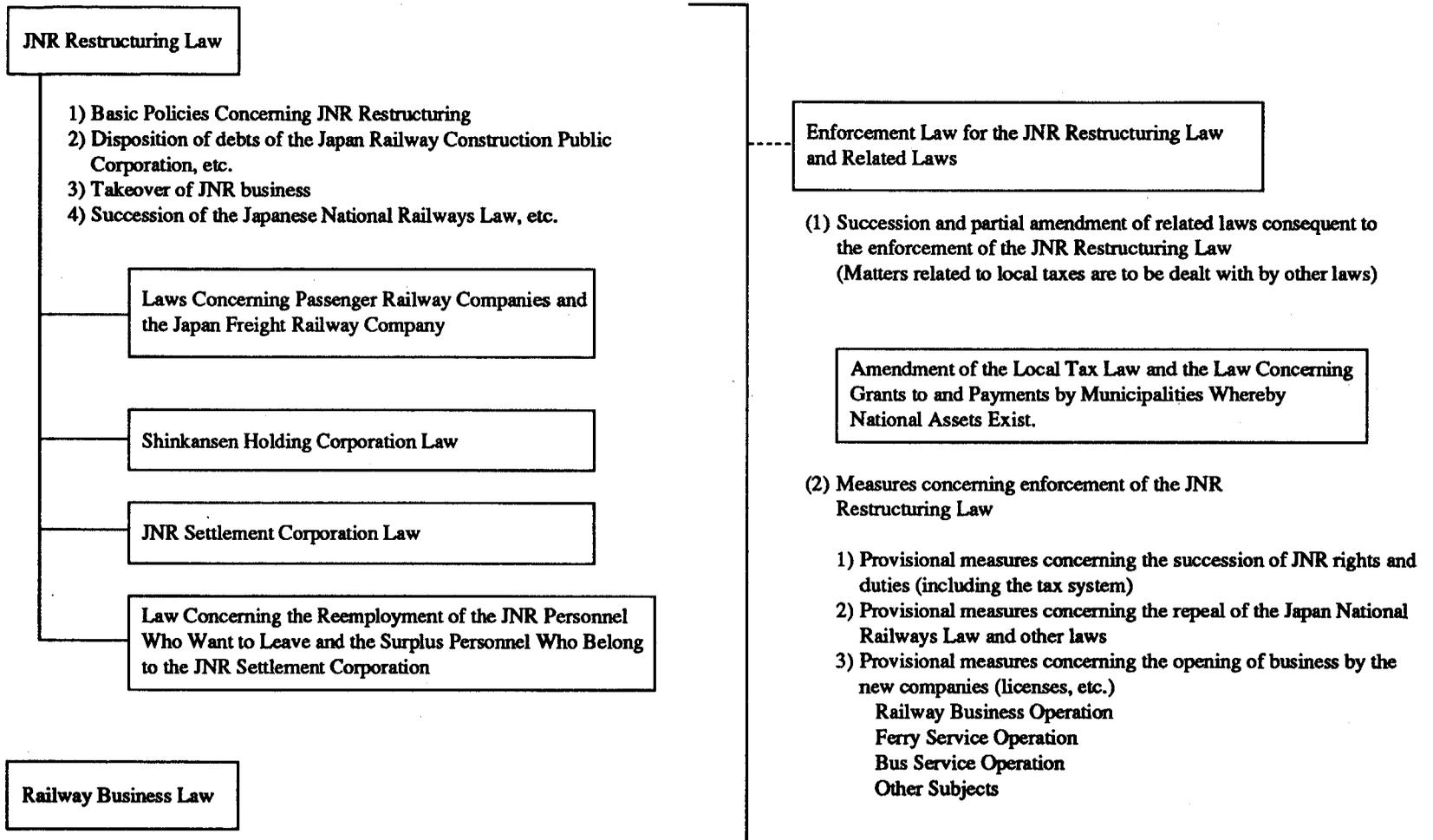
(Law Concerning Passenger Railway Companies and the Japan Freight Railway Company)

4.40 This law stipulates that the six passenger railway companies and one freight railway company are in principle authorized to conduct business activities autonomously. Business other than railway operation and related activities is to be approved by the Minister of Transport. The law stipulates, however, that the Minister of Transport must approve these matters unless they pose serious problems. The law also provides an exemption from JNR management liabilities for the three island companies and requires the establishment of the Management Stabilizing Fund. The following matters are subject to approval by the Minister of Transport:

- (a) Election of a CEO and auditors
- (b) Issuance of stocks and bonds and long-term borrowing
- (c) Business plans
- (d) Sales of important assets
- (e) Revision of the articles of incorporation

4.41 In contrast to the case of NTT, there are no restrictions on the purchase of shares by foreigners, nor is the Government obligated to hold any shares. The basic premise of the law is that the former JNR should be transformed into a purely private business entity.

Chart IV-6 Laws Related to JNR Restructuring



(The Shinkansen Holding Corporation Law)

4.42 This law provides for the establishment of a government agency that wholly owns the Shinkansen facilities and rents them to the passenger railway companies concerned. The rentals are to be determined by the agency on the basis of amounts allocated by a method determined by a Ministry of Transport ordinance (subject to a biennial review). The lease periods are also to be determined by the agency on the basis of the average number of years of use remaining for facilities. The law states that after the end of the term, the Shinkansen facilities are to be transferred to the relevant passenger railway companies under terms to be determined by another law.

(The JNR Settlement Corporation Law)

4.43 This law provides for the establishment of a government agency to deal with the redemption of JNR's long-term liabilities and to provide measures for the reemployment of surplus personnel. The sales of land to partially cover the repayment of debts are to be conducted by open bidding and similar methods. The law also provides for the establishment of the Asset Disposal Council as an advisory body to the chairman of the Settlement Corporation in order to ensure appropriate and fair treatment during such sales. As for the redemption of liabilities, it states that the Corporation is to prepare and implement policies for scheduled repayments and securing funds in order to ensure smooth and definite repayment. Furthermore, it stipulates that the annual repayment plan is to be approved by the Minister of Transport.

(The Law Concerning the Promotion of the Reemployment of the JNR Personnel Who Want to Leave and Surplus Personnel Who Belong to the JNR Settlement Corporation)

4.44 Because the restructuring of JNR created large numbers of employees in need of reemployment, this law provided for the securing of reemployment for those who wished to retire voluntarily from JNR and those who were transferred to the JNR Settlement Corporation. It also provided for support measures for these workers. The contents of this law are as follows:

- (a) The government was to prepare a "reemployment promotion policy" for voluntary retirees and a "basic plan for the promotion of reemployment" for JNR Settlement Corporation personnel.
- (b) The Corporation was to prepare an "implementation plan" concerning the promotion of reemployment and to obtain approval from the minister in charge.
- (c) The Government would endeavor to employ those who voluntarily retired from JNR and the JNR Settlement Corporation.

4.45 The law also included a request to private industries and local governments to employ surplus personnel and included special measures for vocational training by the Government and the Employment Promotion Corporation. This law expired in April 1990.

(The Railway Business Law)

4.46 This law provided for unified legal regulations covering both the former JNR and the private railways and aimed for the sound development of the railway industry and the protection of the benefits for its users. That is, it provided for new statutory regulations to cover all railway business operators. This law was necessitated by the privatization and division of JNR, which transformed JNR from a public utility to a private enterprise and

thus eliminated the need to distinguish the government transport system from private systems.

- (a) The law provides for flexible licensing standards to authorize a transportation business operator, in addition to operating his own railway line, to engage in the businesses of operating a railway line borrowed from another company and for renting his own railway line to another operator to operate it.
- (b) The law significantly relaxes the restrictions on private railways. For example, the system of obtaining approval for an operation plan was replaced with the requirement to merely submit a report on it.

(The Enforcement Law for the JNR Restructuring Law and Related Laws)

4.47 The enactment of the JNR Restructuring Law affected 150 other laws, making it necessary to amend them. Of these, two-thirds were instances of the abrogation of laws, such as the JNR Law, and of revising legal terms and phrases. The remaining laws dealt with the following issues: the disposition of special remote railway lines whose status could not be determined before division of the JNR; labor issues involving the employees of the new corporations (who are excluded from coverage by the Public Corporation and Government Enterprise Labor Relations Law); redefinition of the principal builder-operator of the Shinkansen as "a corporation appointed by the Minister of Transport;" and other highly important and substantive revisions of the old system.

4.48 The privatization and division of the JNR have been carried out. However, until stock of the JRs is publicly sold, the new corporations resemble state-run enterprises. Thus there are concerns about the possibility of political intervention in such matters as the Planned Shinkansen Line and the selection of top management personnel.

C2. Newly Created Companies

4.49 The passenger transport business of the JNR was divided into six passenger railway companies: JR East Japan, JR Central Japan, and JR West Japan, which trisect the main island (Honshu), and the respective companies for the three smaller islands of Hokkaido, Shikoku, and Kyushu. This division followed a plan for regional division that would make effective business administration and region-friendly management of railways possible. The study for this plan paid close attention to passenger flows, the technical problems arising from such a decentralization, and the minimization of costs. The bus transport business was similarly divided and was initially taken over by the passenger railway corporations while consideration was given to the possibility of making these divisions into separate companies.

4.50 Each of the passenger railway companies took over either the assets of related businesses or stocks of related companies such as station buildings, adjunct facilities, hospitals, and railway schools, depending on their relationships with the railway businesses.

4.51 Most of the JNR management had opposed privatization and were not appointed to management positions at the new JRs. JR chairmen were chosen from among influential business leaders in the local business communities. The first President of the East Japan Company, the biggest among the JRs, was a former vice minister of the Ministry of Transport and had been a member of the Supervisory Committee. The Presidency of the JR West also was assumed by a former high ranking official of the Ministry. The presidents of other JRs were selected from JNR management members who had not opposed

privatization. Other leaders within JNR who had promoted privatization were appointed to influential management posts in the new JRs.

4.52 The East Japan Railway Company (JR East Japan, capitalized at \$1,538 million, or ¥200 billion) assumed 74 lines, including the Tohoku and Joetsu Shinkansen lines, with 7,567 kilometers of track (including five remote railway lines of 203 kilometers) and 1,744 stations in the Tohoku, Kanto, and Koshinetsu regions. JR East Japan also inherited the JNR bus routes in the Kanto and Tohoku regions, but it turned them over to its two wholly owned subsidiaries in April 1988. As for related businesses, the new Corporation took over the investment stocks of 58 corporations, worth \$136 million (¥17.7 billion). It also inherited some of JNR's long-term liabilities, including private-sector loans totaling \$3,283 million (¥426.8 billion) and railway bonds totaling \$22,092 million (¥2,871.9 billion).

4.53 The Central Japan Railway Company (JR Central Japan, capitalized at \$861 million, or ¥112 billion) inherited the Tokaido Shinkansen line and 14 lines with 2,003 kilometers of track, as well as 397 stations in the Chukyo region centered around Nagoya (including remote railway lines of 19 kilometers). It also inherited the Tokai region bus routes but turned them over to a wholly owned subsidiary in April 1988. As for related businesses, the new corporation took over the investment stocks of 13 companies, totaling \$25 million (¥3.3 billion). It also inherited a portion of JNR's long-term liabilities, including private-sector loans totaling \$318 million (¥41.3 billion) and railway bonds totaling \$2,138 million (¥277.9 billion).

4.54 The West Japan Railway Company (JR West Japan, capitalized at \$769 million, or ¥100 billion) took over 54 lines with 5,323 kilometers of track and 1,268 stations (including seven specific remote railway lines of 232 kilometers) in the Kinki, Chugoku, and Hokuriku regions, including the Sanyo Shinkansen. It also inherited bus routes in the Kinki and Chugoku regions but transferred them to its two wholly owned subsidiaries in April 1988. As for related businesses, JR West Japan took over the investment stocks of 32 companies for a total of \$77 million (¥10 billion). It also inherited a portion of JNR's long-term liabilities, including private-sector loans of \$1,011 million (¥131.4 billion) and railway bonds totaling \$6,804 million (¥884.5 billion).

4.55 The Hokkaido Railway Company (JR Hokkaido, capitalized at \$69 million, or ¥9 billion) took over 21 lines, including the Hakodate Main Line, with 3,177 kilometers of track and 631 stations (including seven remote railway lines of 635 kilometers). It also took over the bus routes in Hokkaido and investment stocks worth \$9 million (¥1.2 billion) of nine related businesses. JR Hokkaido was exempted from assuming any of JNR's long-term liabilities. Instead, it received \$5,248 million (¥682.2 billion) in a management stabilizing fund in the form of credit against the JNR Settlement Corporation.

4.56 The Shikoku Railway Company (JR Shikoku, capitalized at \$27 million, or ¥3.5 billion) inherited 9 lines with 881 kilometers of track and 266 stations in Shikoku, including the Yosano Main Line (also including one remote railway line of 44 kilometers). It also inherited bus routes in Shikoku and is either unifying or abolishing lines in sparsely populated areas while endeavoring to develop long-distance inter-urban lines. The company took over five related businesses whose values totaled \$610,000 (¥79 million). JR Shikoku was exempted from assuming any of JNR's long-term liabilities and received \$1,602 million (¥208.2 billion) as a management stabilizing fund in the form of credit against the JNR Settlement Corporation.

4.57 The Kyushu Railway Company (JR Kyushu, capitalized at \$123 million, or ¥16 billion) inherited 29 lines in Kyushu with 2,406 kilometers of track and 619 stations (including 9 remote railway lines of 305 kilometers). It also took over the bus routes in Kyushu and is establishing long-distance services to the main cities of Honshu. As for related businesses, it inherited the investment stocks of 10 companies for a total of \$8

million (¥1 billion). In May 1990, JR Kyushu inaugurated a shipping service, and in March 1991 it became the first JR corporation to establish an international shipping service (Hakata-Pusan, Korea). The company was exempted from inheriting any of JNR's long-term liabilities and instead received \$2,982 million (¥387.7 billion) as a management stabilizing fund in the form of credit against the JNR Settlement Corporation.

4.58 As for the freight railway business, transportation distances are relatively long (compared with those of passenger railway businesses) and the demands for transportation to and from terminal locations are likely to become unbalanced. Thus, the conditions of freight flow and train operation patterns are quite different from those of passenger transportation. Furthermore, in order to identify the locus of managerial responsibility based on the balance sheet control which is peculiar to freight transportation, it was felt desirable to have a nationwide organization independent of the passenger sector. For these reasons, the Japan Freight Railway Company was established (JR Freight, capitalized at \$146 million, or ¥19 billion). JR Freight took over freight transport operations in 99 line areas with 10,011 kilometers of track and 368 freight-handling stations, including the Tokaido Line. The total business track length had expanded to 10,136 kilometers as of March 31, 1991, with the completion of the Seikan Undersea Tunnel, the Seto Ohashi Bridge [the Honshu-Shikoku Rail-Road Bridge], and other projects. This company inherited only 82 kilometers of freight train track, tracks reserved for exclusive use by freight trains and freight cars. In the major business line areas, the company operates freight trains with basic facilities, including rails, rented from passenger railway companies. This mode of operation has its legal basis in the Railway Business Law which was enacted along with the laws related to the JNR Restructuring Law and clearly follows the system of separating the management and ownership of railway facilities.

4.59 As for related businesses, the company inherited the investment stocks of 27 companies for a total of \$62 million (¥8 billion). Furthermore, of JNR's long-term liabilities, it inherited private-sector loans totaling \$94 million (¥12.2 billion) and railway bonds totaling \$632 million (¥82.2 billion).

4.60 It was decided that the railway facilities (exclusive of passenger cars) of the Tohoku, Joetsu, Tokaido, and Sanyo Shinkansen lines were to be owned exclusively by the Shinkansen Holding Corporation, a government agency, which would lease them to JR East Japan, JR Central Japan, and JR West Japan. The terms of lease would be 30 years and the conditions of the annual rental agreement are as follows:

- 1) The outstanding liability as of April 1987 was \$65,700 million (¥8,541.0 billion). The debt would be repaid on an equal installment basis for 30 years. The annual rental consists of annual installments, tax obligations, management fees, etc..
 - (1) These liabilities consist of two items: an inherited debt, totaling \$43.494 billion (¥5,654.2 billion), the portion of JNR long-term liabilities equivalent to the book value of the Shinkansen facilities as of the end of FY1986; and new debt totaling \$22.206 billion (¥2,886.8 billion), which represents the difference between purchasing price and book value, which the corporation assumed from the JNR Settlement Corporation.

Table IV-2 General Condition of the JR Companies (FY1990)

		Unit	Hokkaido	East Japan	Central Japan	West Japan	Shikoku	Kyushu	Freight
Business Kilometers	Shinkansen	km	-	835	553	624	-	-	-
	Conventional Lines		2,629	6,663	1,431	4,484	856	2,101	10,136
			2,629	7,498	1,984	5,108	856	2,101	10,136
Capital		69	1,538	861	769	27	123	146	
Gross Assets	US\$	7,895	28,757	8,215	10,110	2,748	6,123	1,596	
Net Assets	millions	7,270	3,694	2,594	1,671	2,477	5,428	347	
Management Stabilizing Fund		5,248	-	-	-	1,602	2,982	-	
Transported Volume	Shinkansen	100	-	148	413	160	-	-	-
	Conventional Lines	million person-	46	1,050	97	361	21	80	*268
		km	46	1,198	510	521	21	80	*268
Transport Density	Shinkansen	%	-	48.4	204.9	70.6	-	-	-
	Conventional Lines		4.8	43.2	18.6	22.0	6.6	10.4	-
			4.8	43.8	70.5	28.0	6.6	10.4	-
Operating Revenue		808	14,244	8,472	6,864	370	1,159	1,577	
Operating Profit	US\$	-377	2,248	1,024	942	-67	-221	87	
Current Profit	millions	12	1,152	994	673	65	31	58	
Net Profit		4	442	410	229	28	5	22	

* Unit: 100 million ton-km

Source: JRs

4.61 Rent will be distributed among the various lines in proportion to the number of (1) transported person-kilometers for each Shinkansen (based on actual figures for the most recent two years); and (2) the reacquisition costs of each Shinkansen (reacquisition price per business-kilometer). The Corporation is to pay the above debts as part of this rent. It will also be responsible for the construction of the Tokyo-Ueno sector of the Tohoku Shinkansen and large-scale repair work in the case of disaster, if the damage is expected to cost more than \$38 million (¥5 billion). (The expenses for this work are to be retrieved from the three Honshu Railway corporations as rent.)

4.62 It was decided that some of the JNR businesses in the telecommunications field should be operated in an integrated manner, since they affected the operations of all the passenger and freight railway companies. These businesses utilize microelectronic communications networks, such as optical fiber and coaxial cable transmission routes, and through telecommunications equipment, such as the principal telephone exchanges that were taken over by the Railway Telecommunications Company (capitalized at \$25 million (¥3.2 billion)). Of JNR's long-term liabilities and assets, this company inherited 53 telephone exchange offices, 770 kilometers of optical-fiber cables, 1,560 kilometers of coaxial cables, and \$277 million (¥16.8 billion) in private-sector loans. The Railway Telecommunications Company was established in December 1986 with capital from JNR. This capital was later inherited by the six passenger railway companies and the freight railway company.

4.63 It was felt that some of the operations of JNR concerned with data processing, such as the multi-access seat reservation system, would be more efficiently managed if they were under one control system. Thus, this business was taken over by the Railway Information System Inc., which was capitalized at \$8 million (¥1 billion). This company assumed debts of \$129 million (¥16.8 billion) from the long-term liabilities JNR had obtained from the private sector. The corporation also inherited the Central Information System Control Center and equipment and electric circuits necessary for the operation of information-processing systems owned by JNR. The company was established in December 1986 with capital provided solely by JNR. Its investments were subsequently inherited by the six passenger railway companies and the freight railway company.

4.64 The JNR businesses related to experimental research, including projects being conducted by the Railway Technical Research Institute, need to be conducted by a single organization because they have an impact on the business operations of all passenger and freight railway companies. As a consequence, these were taken over by the Railway Technical Research Institute Foundation, a corporation founded in December 1986 by JNR. The funds provided by JNR for establishing this company were later inherited by this Institute under the new reorganization of April 1987. According to its articles of incorporation and agreements with the JR's, the Institute receives funds from each JR according to a certain percentage of their incomes. The present rates are 0.35% for the passenger companies and 0.035% for the freight company. These contributions serve as the principal source of funds for experimental research.

C3. Business Environment of Newly Created Companies

(East Japan Railway Company)

4.65 As of March 1991, JR East Japan operated a total of 7,498 kilometers of track (conventional lines--6,663 km; Shinkansen lines--835 km). In FY1990, the conventional lines provided 88% of its total passenger volume and 76% of revenue. Commuters and students in the Tokyo metropolitan area accounted for the majority of each of these categories. The concentration of administrative and industrial functions in the capital region, the outward expansion of housing areas due to rising urban real-estate prices, and the greater commuting distances in Tokyo have made the rail lines in this area the most

congested commuting routes in the nation. This means that building a comfortable transportation environment by mitigating commuter congestion in this region is the most important challenge this company faces. Therefore, in the area of capital investment, for example, the JNR-era practice of scattering funds has been replaced with specific targeting. Investments have been made in the purchase of new trains and cars, air-conditioning, and new automatic train control systems that make possible safer and heavier flows of traffic.

4.66 In the area of related businesses, the company has vigorously made new investments, including the construction of station buildings, and also created new businesses such as travel agencies, insurance services, and ski resorts. Furthermore, emphasis has been placed on strengthening and regrouping subsidiaries and affiliated companies.

4.67 As a result of these efforts, JR East Japan's annual transport volume increased an average of 4.7% from its first year. Operating revenue rose 5.8%, current profits doubled in three years, and the profit-and-loss situation was significantly improved. The company had inherited \$25.375 billion (¥3,298.7 billion) worth of debts, but by the end of FY1990, long-term liabilities had been reduced by about 25%, to \$18.732 billion (¥2,435.1 billion).

(Central Japan Railway Company)

4.68 As of March 1991, the Central Japan Railway Company (JR Central Japan) operated 1,984 kilometers of track (conventional lines--1,431 km; Shinkansen lines--553 km). In FY1990, 81% of its total transport volume and 88% of its revenue derived from the Tokaido Shinkansen. The expansion of national economic activities has generated an upward trend in the demand for transportation services between Tokyo and Osaka. Consequently, the Tokaido Shinkansen is constantly used to capacity. On the other hand, some parts of this line, which is now 27 years old, have become superannuated. Accordingly, the replacement of old facilities, the expansion of transportation capacity, and the development of alternative means of transportation have become essential tasks for this company.

4.69 In order to cope with superannuation of the Shinkansen, the company is investing heavily in passenger car renewal and line maintenance by using its capital investment and maintenance funds. In order to realize the expansion of transport capacity, the company has increased the number of runs by strengthening power supply facilities and automatic train control. During the JNR years, about 10 Shinkansen trains were run each hour. After March 1989, the number was increased to 11. Today, the company continues to increase investment in order to reach the objectives of 15.

4.70 The company is also working on increasing the speed of its trains by introducing new-model passenger cars. For example, the Tokyo--Shin-Osaka run has been reduced to two hours and 30 minutes from 2 hours and 56 minutes. Regarding the development of a new generation of transportation, the company has been working on the development of a superconductive magnetic-levitated train in collaboration with the Railway Technical Research Institute.

4.71 At the same time, the company is making efforts to compete with the private railways as a conventional railway. Such efforts include the construction of new stations between leading cities on the Tokaido and Chuo lines, schedules that better meet the needs of local passengers, and the introduction of new-model limited express trains on sight-seeing routes to attract more passengers.

4.72 As a result, transport volume and operational revenue attained high average annual growth rates of 7.4% and 8.0%, respectively, the first year of privatization. Current profits, have doubled in three years, like those of JR East Japan. However, in spite of

huge capital investments in the Shinkansen, the company was allowed only a small amount of depreciation for these investments because the Shinkansen facilities are owned by the Shinkansen Holding Corporation. Long-term liabilities have increased to \$2.879 billion (¥374.3 billion) by the end of FY1990, from \$2.456 billion (¥319.1 billion) at takeover.

(West Japan Railway Company)

4.73 As of March 1991, JR West Japan operated 5,108 kilometers of track (conventional lines--4,462 km; Shinkansen lines--646 km). In FY1990, the ratio between the Sanyo Shinkansen and conventional lines in terms of transported volume was 31:69, but the ratio for revenues was 44:56. This is close to the income-expenditure structure of the old JNR and is a consequence of two factors: 1) the company inherited many low-profit remote lines among the conventional lines it acquired; 2) commuter lines near Osaka, the main revenue source, are being challenged by competing private railways. For these reasons, the ratio of current profit for the first year of operation was 1.1%, much lower than the corresponding figures for JR East Japan (4.9%) and JR Central Japan (6.9%). The company has been concentrating its energies on improving profitability by trying to attract customers to its main sources of profit (Sanyo Shinkansen and lines in Osaka and the surrounding areas), to make more efficient use of the lines in unprofitable remote areas, and to promote the development of related business enterprises.

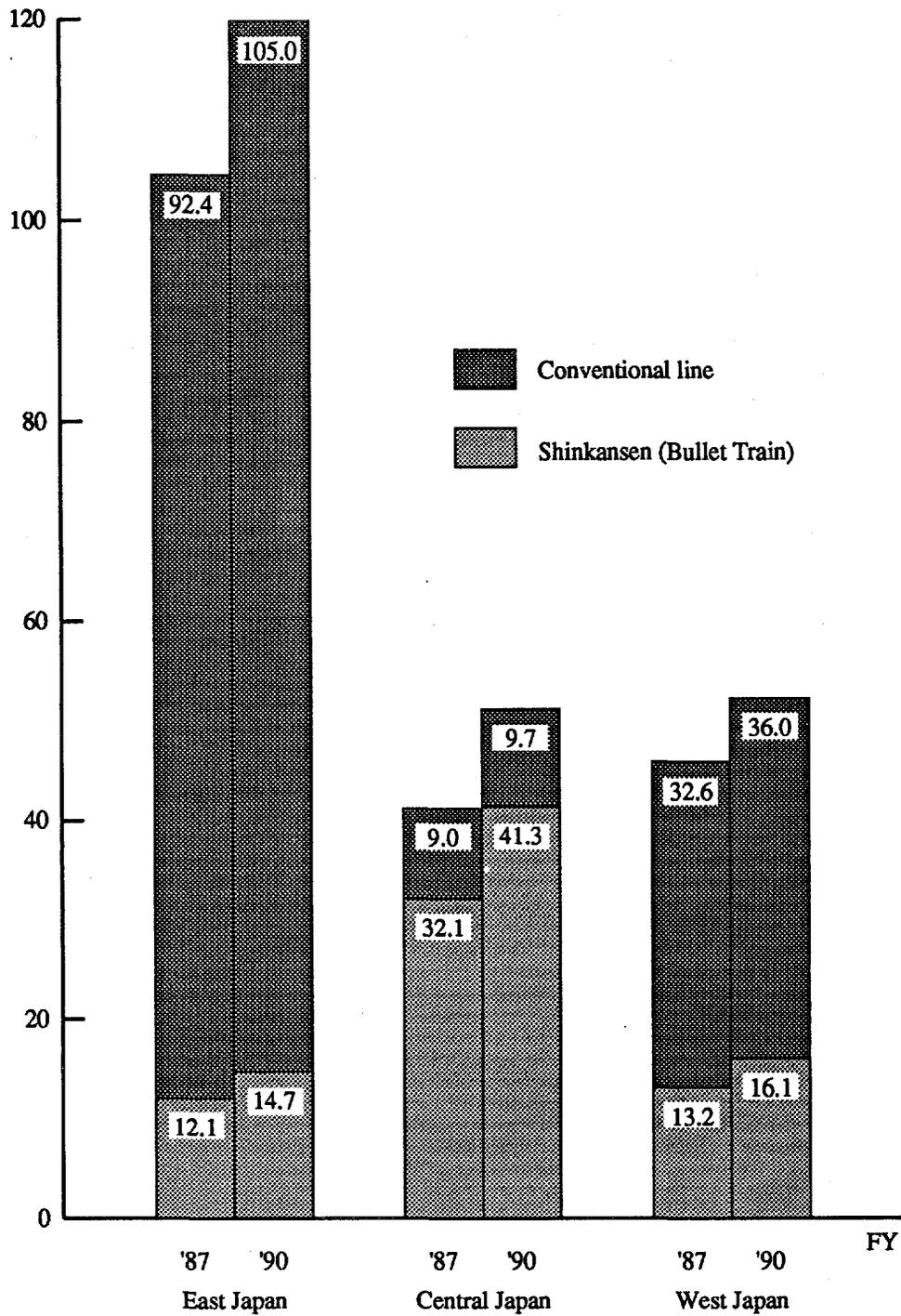
4.74 To stimulate demand for railway transportation, JR West Japan is introducing new Shinkansen cars with improved internal accommodations, new commuter trains, and deluxe sleepers. It is also setting train schedules to better meet local needs and improving station facilities. To improve the efficiency of low-profit lines, the company has gradually replaced the system of using manpower according to job category (such as station hand, driver, and conductor) with a more flexible system which will allow for the more efficient management of each line.

4.75 As for related businesses, there are two newly established divisions which are completely free from the existing railway businesses and ready for new business opportunities. One is the Business Operations Headquarters responsible for new business such as hotels and the managerial control of the satellite companies. The other is the Regional Development Headquarters, responsible for projects such as station buildings, utilization of space under elevated tracks, and resort businesses. These are examples of efforts to promote business enterprises independent of the railway industry.

4.76 As a result of these efforts, transportation volume has expanded 4.4% on an annual average and operating revenue rose 5.4% per year. The company's current profit has expanded about 10-fold in three years, pushing its current profit ratio to 9.8%. This compares favorably with the two other companies on the island of Honshu (JR East Japan--8.1%; JR Central Japan--11.7%). The company assumed a total of \$7.815 billion (¥1,015.8 billion) in long-term liabilities from JNR as of the end of FY1990. However, this amount had been reduced to about two thirds of that, or \$5.060 billion (¥657.8 billion), by the end of FY1990.

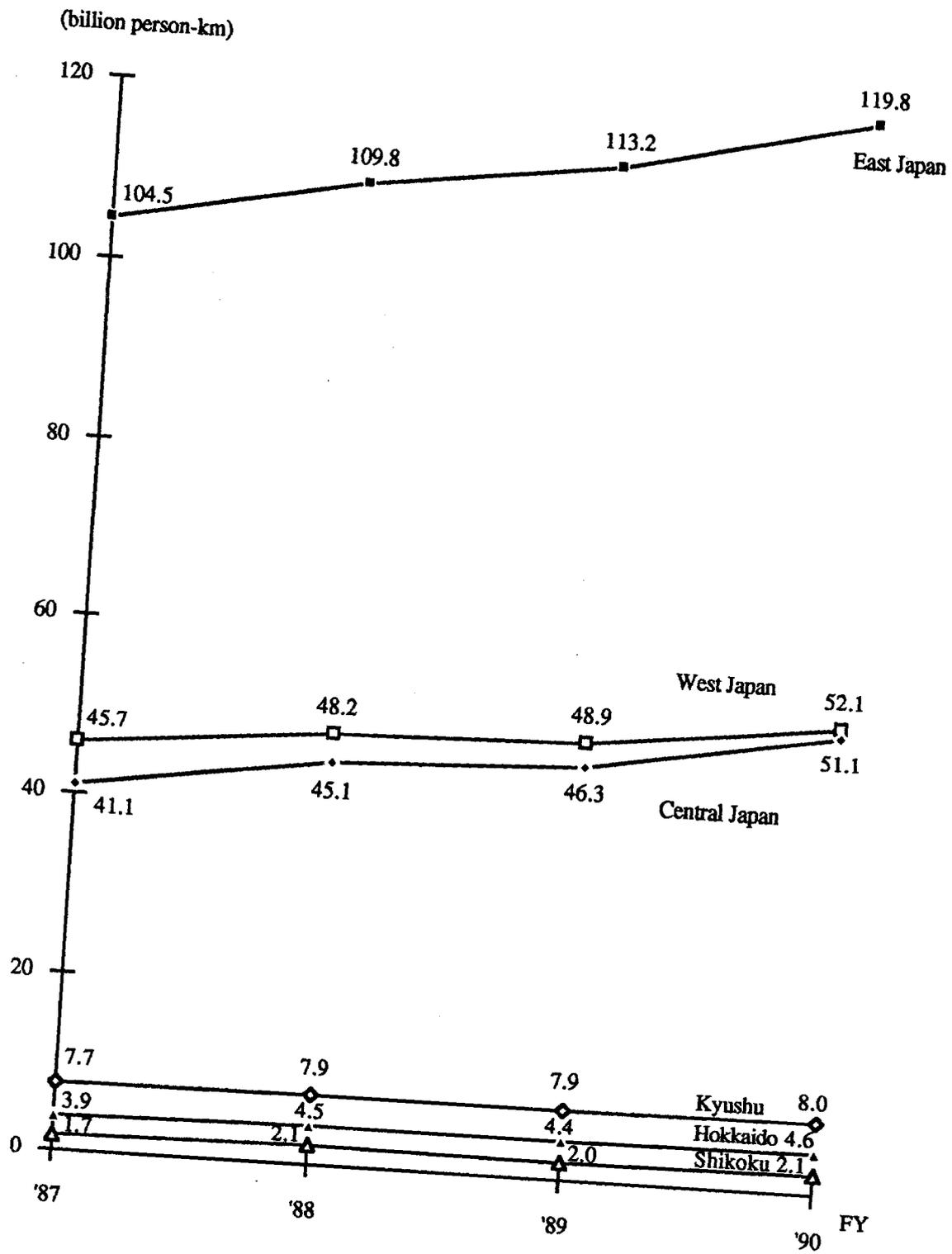
Figure IV-2 Volume Transported by Shinkansen and Conventional Lines of the Three Honshu Railway Companies

(billion person-km)



Source: JRs

Figure IV-3 Trend of Passenger Volumes in the JRs



Source: JRs

(Hokkaido Railway Company)

4.77 As of March 1991, the Hokkaido Railway Company (JR Hokkaido) operated a total of 2,629 kilometers of track. Hokkaido is a large and sparsely populated island with a population density that is about 20% of the national average. These factors create an environment unfavorable to railway operations. In FY1990 the company's transportation density was 4,800 passenger/km, far below the 32,300 passenger/km average of the six JR passenger companies. Obviously, most of the operating lines of this company produce no profit. As mentioned earlier, in order to improve the profits of the three island companies in Hokkaido, Shikoku, and Kyushu, Management Stabilizing Funds were established to offset business losses with profits from these funds. However, in spite of this special measure, this company still produced a current account loss in 1987 and 1988. Thus, it is making efforts to rationalize remote transportation routes (making them local private companies or converting them to bus service); to entice tourists by taking advantage of the completion of the Seikan Under-Sea Tunnel; to expand transportation in the Sapporo Urban Circle; and to engage in marketing, commodities, real-estate leasing, and related businesses. These steps are being taken in order to reduce operating losses. Specifically, the company has introduced Ueno-Sapporo limited express sleepers; increased runs to link resort areas within Hokkaido; emphasized tourist promotion campaigns; carried out sales of special program-related tickets; expedited construction of elevated tracks near Sapporo Station and opened commercial facilities under these tracks; and introduced new-model commuter trains.

4.78 As a result of such efforts, the company's annual average transport volume rose 5.8% and its revenue increased 4.5% after privatization. Since 1989, the company has been posting a current profit (in FY1990 the current profit ratio was 1.5%).

(Shikoku Railway Company)

4.79 As of March 1991, the Shikoku Railway Company (JR Shikoku) operated a total of 856 kilometers of track. The steep Shikoku Range running across the island has hampered development of a transportation network. This is also why a major portion of the company's lines remains single-track and unelectrified. The Railway's business environment is becoming even more unfavorable as highways are being built that will eventually crisscross the entire island. The company has been working to improve profitability by bringing more business passengers onto the island from the Kinki Region by utilizing the Seto Ohashi Bridge across the Inland Sea (which competes with ships and aircraft); speeding up trains on the main lines by electrification; increasing the number of runs; and constructing station buildings in principal cities. More specifically, efforts are being made to increase the number of express and limited express trains between Takamatsu and Okayama (Honshu), and to introduce new-model, high-speed trains.

4.80 As a result of these efforts, the company's total transportation volume and operating revenue rose at an annual rate of 7.7% and 10.8%, respectively, after privatization. Likewise, current profits increased about eightfold during the first three years of privatization.

(Kyushu Railway Company)

4.81 As of March 1991, the Kyushu Railway Company (JR Kyushu) operated 2,101 kilometers of track. Kyushu has two metropolises (Fukuoka and Kita-Kyushu) with populations of 1 million each, and urban areas surrounding the prefectural capitals with populations ranging from 300,000 to 500,000. In addition to these population centers, the island has an abundance of sightseeing resources. All these factors make for a stronger demand for transportation when compared to that of the other three island companies.

However the expressways running through Kyushu both east and west and north and south have almost been completed, and every prefecture except Saga has an airport. These facts make for strong competition among the various means of transportation. Therefore, the company plans to improve its passenger capacity and to raise its own profitability by introducing new-model express trains in the inter-urban lines; making commuter lines within the Fukuoka urban area more convenient (speedups and more frequent runs); scheduling direct runs to tourist sites; and conducting other related businesses, such as managing shops, station buildings, and diverse real-estate operations.

4.82 As a result of these efforts, transport volume increased after the first year of privatization about 1.4% annually, while operating revenue increased about 5.1%. However, revenues from new businesses (including maritime shipping and real estate) have yet to produce a profit or reduce the company's operating losses.

(Management Stabilizing Fund)

4.83 As seen above, the three island companies are endeavoring to improve profitability through managerial efforts. These efforts, however, merely reduce business losses, and it is thought that the profit and loss structure supported by the Management Stabilizing Funds each received at privatization is unlikely to change in the near future. These funds are provided in the form of debt owed to the three island companies by the JNR Settlement Corporation for a redeemable period of 10 years (with a grace period of 2 years) and a semi-annual installment repayment plan (with an interest rate of 7.3%). After FY1989, when the redemption of the principal began, the three island companies were required to take responsibility for the operation of the Fund in order to maintain the principal-interest yield at a level somewhere near the annual interest rate of 7.3%. The profit gained from managing the Fund totaled \$718 million (¥93.3 billion) for the years FY1987 and FY1988. But it dropped to \$716 million (¥93 billion) in FY1989 and \$708 million (¥92.1 billion) in FY1990. This suggests that the efficient management of the repaid principal will be an important managerial issue for the three island companies.

Table IV-3 Change in the Amount of Profit Gained from the Management Stabilizing Fund Operation

	(US\$ millions)			
	Hokkaido	Shikoku	Kyushu	Total
FY1987	383	117	218	718
FY1988	383	117	218	718
FY1989	382	117	217	716
FY1990	377	115	216	708

Source: JRs

(Japan Freight Railway Company)

4.84 As a result of a strong demand for container transportation, the total freight volume, which had shown a steady downturn during the JNR years, has picked up at an annual rate of 10.3% on average since FY1988. JR Freight's transportation volume has changed favorably in comparison with that of the JNR years for several reasons. First, the Japanese economy has experienced a steady growth since 1987 and this has increased the demand for transportation as a whole. Second, truck transport currently operates at full capacity and has limited prospects for increasing this capacity due to highway congestion and a shortage of long-distance truck drivers. Third, the company itself has endeavored to design schedules which accommodate the needs of its customers and have made services more convenient by introducing refrigerated cars and piggyback transport (four-ton trucks loaded directly onto trains).

4.85 In terms of cost-saving efforts, however, the company has resorted to a system of "avoidable cost," aiming to shoulder, out of the expenses shared with passenger transportation, only those inherent to freight transportation. This system has made it possible for the company to free itself from the deficits of the JNR years and to post profits. However, the company has had to invest a large sum of money in repairs and renovation. Investments made during the JNR years were insufficient, resulting in the superannuation of equipment and facilities.

4.86 As a result of the efforts outlined above, operating revenue increased by an annual average of 5.8% after privatization, and current profit increased about 26% in three years. Long-term liabilities of \$725 million (¥94.3 billion) have also declined to \$598 million (¥77.7 billion), or a 20% decrease from the amount inherited from JNR, as of the end of 1990.

(Introduction of Competition)

4.87 In the preceding section, we presented a general summary of the business conditions of each of the JRs. In the following we examine the effect of the introduction of the principle of competition through privatization.

4.88 To begin with, each company has worked hard to improve its public image as a private enterprise by adopting management strategies which make the delivery of services to their passengers their primary goal. As such, management at each company has improved passenger accommodations at stations and in trains, speedups of train times, and increases in the frequency of scheduled runs. It has also endeavored to improve employee attitudes toward customers.

4.89 Second, the JRs have tried to diversify and upgrade services through the introduction of new types of vehicles appropriate to each line, the start-up of direct runs to tourist sites, and the introduction of deluxe sleepers.

4.90 Third, these companies have committed themselves to technological development in order to speed up train times and to improve safety and convenience. The JRs have developed their own new-model trains and competed among themselves to raise the speed of both the Shinkansen trains and the limited express trains on the conventional lines. They have financially supported new technological advances developed at the Railway Technical Research Institute. Technological development is also being carried out by each of the companies in order to improve safety and convenience. Some examples are the testing of a new automatic train control system and the innovation of ticket inspection through prepaid cards.

Table IV-4 Trend of the JRs' Revenue by Sector

(US\$ millions)

		Hokkaido	East Japan	Central Japan	West Japan	Shikoku	Kyushu	Freight	Total
FY '87	Railway	559	11,809	6,680	5,746	236	974	1,328	27,332
	Shipping	83	-	-	4	20	-	-	107
	Automobiles	41	109	32	87	15	21	-	305
	Related Items	25	126	16	34	0	4	-	205
	Total	708	12,044	6,728	5,871	271	999	1,328	27,949
FY '88	Railway	624	12,405	7,430	6,112	313	1,045	1,405	29,334
	Shipping	5	-	-	3	4	-	-	12
	Automobiles	42	-	-	-	17	22	-	81
	Related Items	52	392	22	93	3	7	-	569
	Total	723	12,797	7,452	6,208	337	1,074	1,405	29,996
FY '89	Railway	623	12,868	7,689	6,332	316	998	1,478	30,304
	Shipping	-	-	-	4	2	-	-	6
	Automobiles	42	-	-	-	16	25	-	83
	Related Items	103	482	28	82	4	85	-	784
	Total	768	13,350	7,717	6,418	338	1,108	1,478	31,177
FY '90	Railway	660	13,707	8,441	6,766	346	1,011	1,577	32,508
	Shipping	-	-	-	4	2	3	-	9
	Automobiles	47	-	-	-	17	27	-	91
	Related Items	101	537	31	94	5	118	-	886
	Total	808	14,244	8,472	6,864	370	1,159	1,577	33,494

Source: JRs

Table IV-5 Trend of the JRs' Operating Profits by Sector

(US\$ millions)

		Hokkaido	East Japan	Central Japan	West Japan	Shikoku	Kyushu	Freight	Total
FY '87	Railway	-412	2,216	547	539	-108	-216	86	2,652
	Shipping	-2	-	-	1	1	-	-	0
	Automobiles	-3	-25	-7	-21	-5	-8	-	-69
	Related Items	3	89	11	26	-3	2	-	128
	Total	-414	2,280	551	545	-115	-222	86	2,711
FY '88	Railway	-397	2,432	780	605	-76	-213	82	3,213
	Shipping	0	-	-	1	-0	-	-	1
	Automobiles	-4	-	-	-	-5	-7	-	-16
	Related Items	-10	54	8	5	-2	1	-	56
	Total	-411	2,486	788	611	-83	-219	82	3,254
FY '89	Railway	-390	2,133	865	682	-77	-179	76	3,110
	Shipping	-	-	-	1	-2	-	-	-1
	Automobiles	-11	-	-	-	-7	-9	-	-27
	Related Items	-4	29	10	16	-3	-34	-	14
	Total	-405	2,162	875	699	-89	-222	76	3,096
FY '90	Railway	-372	2,186	1,023	911	-55	-161	87	3,619
	Shipping	-	-	-	1	-2	-7	-	-8
	Automobiles	-13	-	-	-	-7	-10	-	-30
	Related Items	8	62	1	30	-3	-43	-	55
	Total	-377	2,248	1,024	942	-67	-221	87	3,636

Source: JRs

4.91 Fourth, in trying to meet the stiff competition from other private railways, the new JR companies have shifted away from the practice carried out during the JNR era of placing top priority on Tokyo and the trunk lines. They are trying to develop passenger-friendly train schedules in outlying cities while at the same time making train runs in the urban zones generally more frequent.

(Listing on the Tokyo Stock Exchange)

4.92 In order to complete the transition to private enterprise, the JRs need to secure managerial independence, diversify their sources of funds, and increase their social credibility by listing their stocks. The criteria for obtaining listing on the Tokyo Stock Exchange are as follows:

- (a) Net assets must be twice as large as paid-in-capital
- (b) Both current and pre-tax profits in the financial period immediately before listing must be more than 40% of paid-in-capital and more than 30% of paid-in-capital in the two preceding periods
- (c) A dividend must have been paid in the immediately preceding period
- (d) The company must have been in business continuously for at least five years.

4.93 Among the JRs, JR East Japan, JR Central Japan, and JR West Japan met all the required guidelines by the end of PY 1991. Other companies have not met all the requirements but are endeavoring to meet them in the near future. (Refer to the paragraphs 4.109 ~ 4.111, P.89).

(The Shinkansen Holding Corporation is Reorganized as The Railway Development Fund)

4.94 The Shinkansen Holding Corporation used the rental fees it has collected from the three Honshu-based JR companies to offset the liabilities it assumed from JNR. Liabilities which had been \$65.700 billion (¥8,541 billion) at the beginning of 1987 were reduced to \$62.404 billion (¥8,112.5 billion) by the end of FY1990. The corporation also completed the Tokyo-Ueno stretch of tracks to be used by the Tohoku and Joetsu Shinkansen (operations began in June 1991). As mentioned earlier, the establishment of a system whereby a single corporation would hold all of the Shinkansen lines was devised to allocate the profits derived from the Shinkansen operations among the three Honshu companies. As studies progressed on how to list the stocks of Honshu-based three passenger companies, however, the question arose as to how to dispose of Shinkansen assets after the 30-year leasing period ended.

Table IV-6 Achievement of Criteria Required for Stock Listing

(US\$ millions, %)

		Hokkaido	East Japan	Central Japan	West Japan	Shikoku	Kyushu	Freight	
Net assets	Standards	138	3,077	1,723	1,538	54	246	292	
	FY '87	2,003	2,493	1,401	1,208	805	2,402	278	
	FY '88	2,017	2,811	1,671	1,243	820	2,411	302	
	FY '89	2,018	3,252	2,185	1,442	848	2,441	325	
	FY '90	2,022	3,694	2,594	1,671	876	2,446	347	
Profit standards	Standards	Three years earlier (fiscal)	21	462	258	231	8	37	44
		Two years earlier (fiscal)	21	462	258	231	8	37	44
		Preceding Fiscal Year	28	615	345	308	11	49	58
	FY '87	-17	555	467	62	8	12	46	
	FY '88	-10	659	730	133	44	23	47	
	FY '89	2	796	834	310	47	30	50	
	FY '90	12	830	902	466	57	23	47	
	Dividend percentage	FY '87	-	-	-	-	-	-	-
FY '88		-	-	-	-	-	-	-	
FY '89		-	-	-	-	-	-	-	
FY '90		-	10	10	10	-	-	-	

Note: Net assets of the Three Island Companies are calculated after deducting of the Management Stabilizing Funds

4.95 On the other hand, JR Central Japan, which had relatively few assets to depreciate and a heavy investment burden related to the Shinkansen, had been urging for some time that Shinkansen facilities be purchased by the Honshu companies. In the end, the existing four Shinkansen lines were sold to the three Honshu companies in October 1991. The sale price was set at \$70.590 billion (¥9,176.7 billion) on the basis of a provisional estimate of the reacquisition price at the time of transfer. Of this amount, \$62.262 billion (¥8,094.1 billion), the equivalent of the existing liability of the Holding Corporation, was transferred according to a 26-year principal-interest installment payment plan. The remaining \$8.328 billion (¥1,082.6 billion) was similarly transferred on the basis of a 60-year installment payment plan. It was decided that the money repaid through the latter plan would be used to establish a special fund for the construction of planned Shinkansen lines, such as the Hokuriku, Kyushu, and other lines.

4.96 Following the transfer of the Shinkansen facilities, the Shinkansen Holding Corporation was reorganized as the Railway Development Fund, a government agency. The Fund assumed responsibility for the repayment of the liabilities which had been owed by the Corporation. This Fund was also established to provide subsidies to the railway industry in a comprehensive and efficient manner, along with the Government's general account resources, for the construction of the planned Shinkansen and other lines. Additionally, the Railway Development Fund provides subsidies for:

- (a) Improvements of the trunk lines, including linking the Shinkansen with conventional lines
- (b) Improvement of metropolitan rail transport systems, such as the building of subways in Tokyo and the construction of new commuter lines (to be carried out in tandem with housing developments)
- (c) Technological development projects, such as the magnetic levitation train
- (d) Safety and disaster prevention measures.

(The Railway Telecommunications Company)

4.97 The telecommunications businesses affiliated with the JRs include the Railway Telecommunications Company, which inherited the railway telephone networks mentioned earlier, and Nippon Telecom, which provides out-of-town calls and exclusive circuit service and its capital is \$69 million (¥9 billion). Nippon Telecom was established in October 1984 with funds from the JNR and the business world in anticipation of the liberalization of the Japanese telecommunications industry which took place in April of, 1985. In order to assure the efficient operation of the communications business under the Government's guidance and facilitate the nationwide development of Nippon Telecom's out-of-town call networks, the Railway Telecommunications Company was merged with Nippon Telecom in May 1989, but only after Nippon Telecom proved it could eliminate the excessive liabilities it had incurred as a result of initial heavy investments. The new company is now offering both ordinary out-of-town telephone service in addition to the railway telephone business it inherited. (The company assumed the name of Nippon Telecom at the time of the merger.)

(The Railway Information Systems Company)

4.98 In addition to managing information systems such as ticket sales systems, the Railway Information Systems Company is actively developing other businesses, including "JR Net," a Class 2 telecommunications business that serves as a medium for information exchange among JR corporations by using the communications networks of the former

Railway Telecommunications Company. The Company is hired on a commission basis by JR groups and other clients to develop data processing systems and other information systems. According to its FY1990 financial statements, while revenue from the businesses it inherited was \$83 million (¥10.8 billion), new businesses generated an additional revenue of \$52 million (¥6.7 billion). This indicates a rapid expansion in the range of business operations. The \$129 million (¥16.8 billion) liabilities which the company inherited were nearly halved to \$65 million (¥8.4 billion) as of the end of FY1990.

(The Railway Technical Research Institute)

4.99 Relying on a fund established by contributions from the JRs (\$93 million, or ¥12.1 billion, in FY1990) and revenue from state subsidies and commissions, the Railway Technical Research Institute Foundation has been carrying out the following activities:

- (a) The development of a superconductive magnetic levitation train
- (b) Testing and research on speeding up the Shinkansen and conventional trains
- (c) Improvement of technological standards for railway facilities
- (d) Inspection of railway facilities
- (e) Provision of information services
- (f) Developing publications and lectures.

4.100 The Research Institute devotes most of its attention to a program for the development of a linear motorcar. In June 1991 the Research Institute received ministerial approval for its basic technological development plan, including the plan for the construction of an experimental line. The Institute is currently cooperating with JR Central Japan and the Japan Railway Construction Public Corporation to build an experimental rail track in the southeastern part of Yamanashi Prefecture. Their goal is to help develop by the basic technology for a new transport system FY1997. The total cost for developing this technology is \$2.675 billion (¥347.8 billion), which is to be born by the Research Institute and JR Central Japan with the cooperation of the state and the Yamanashi Prefectural government.

C4. The JNR Settlement Corporation

4.101 The JNR Settlement Corporation will engage in the following businesses as specified by the JNR Settlement Corporation Law:

- (a) Payment of debts and interest on long-term loans and JNR bonds
- (b) Disposition of the real estate, stocks, and surplus passenger cars inherited by the Corporation
- (c) Assistance in the placement of personnel in need of reemployment.

4.102 The Corporation's main task is the redemption of long-term liabilities through the disposal of assets. For this reason, at the time of the JNR division, the JNR Settlement Corporation acquired 8,180 hectares, or 13% of the total real estate owned by JNR, as land for disposal (a financial resource for debt redemption). The Corporation held both the stocks of the new corporations as a financial resource for debt repayment as well as JNR's stock in the Metropolitan Rapid Transit Authority. The Corporation established an asset disposition council (headed by Mr. Masao Kamei, former Chairman of the Supervisory

Committee) to serve as adviser to the chairman of the JNR Settlement Corporation in order to supervise the formulation of policy and actual disposition of assets.

4.103 The financial resources to be used for the repayment of JNR's \$196.9 billion (¥25.6 trillion) long-term liabilities total \$90.7 billion (¥11.8 trillion), as shown in Table IV-7. It is assumed that the remaining \$106.2 billion (¥13.8 trillion) will be born by the Japanese public (Chart IV-1).

4.104 The original plan called in principle for the disposal of real estate through a series of open bids. However, because it was feared that this method would encourage higher real-estate prices, in October 1987 the Cabinet adopted the Emergency Land Countermeasures Plan. According to this Plan, the sale of real estate would be postponed in areas where real-estate values were sharply rising. Accordingly, the following new methods for the disposal of real estate were implemented:

- (a) The sale of developed real estate (sales of condominiums)

Condominiums are to be built before the land is scheduled for sale. As this sale now becomes a divided interest in a piece of real estate, the sales price of the land is not disclosed.

- (b) The small-lot sales of trust beneficiary rights

Here, real estate is placed in trust with a trust bank and the beneficiary rights received from the bank are broken into small sums before they are sold by the trust bank to retail investors. The total of trust beneficiary rights to be sold are determined by the total present value of the sum of trust dividends for the trust period plus the future sales price of real estate when the trust matures. Hence, the sale price of the land is not disclosed.

- (c) Loan convertible into real estate

In this scenario, the Settlement Corporation obtains a loan to cover the investment cost of carrying out an urban development project using a certain piece of real estate and then uses the real estate itself to repay the principal. The funds which the Corporation has procured constitute a loan. This means that neither a sale nor a purchase of real estate has occurred and therefore the price of the land disposed of is not disclosed.

These three methods are currently in use. The following additional method is also being studied.

- (d) Corporate bonds convertible into stock

The land in question would serve as the capital for a newly established corporation and would later be converted into the corporation's stock. The issuance of bonds convertible into corporate stock is another method of disposing of real estate without involving an actual sale.

Table IV-7 JNR Settlement Corporation's Funds for Redeeming Long-Term Liabilities

Sources of Funds	Amount
Shinkansen Holding Corporation	\$22.2 billion
Revenue from land sales	\$59.3 billion [Estimated sales value in FY87 of \$65.4 billion (Land available for sales 3,350 ha)] - Land improvement expenses \$6.1 billion
Revenue from stock sales	\$9.2 billion (Stocks of passenger and freight railway companies worth \$3.6 billion at face value + Equity in Subway Authority evaluated at \$5.6 billion by the Asset Disposal Council in September 1987)
Total	\$90.7 billion

4.105 Despite efforts to introduce these new methods, the disposal of the JNR assets has proven to be difficult. This is primarily because open bids cannot be employed. (Table IV-8)

4.106 The income from land sold through these newly devised methods was not sufficient to cover annual interest payments. Meanwhile, the sale of government shares in the three passenger railway companies on Honshu was delayed. Part of the reason for this was the bursting of the economic bubble in Japan, which brought about an increase in long-term liabilities for the JNR Settlement Corporation from \$196.9 billion (¥25.6 trillion) at the time of takeover to \$201.5 billion (¥26.2 trillion) at the beginning of FY1991.

4.107 The JNR Settlement Corporation is planning to actively redevelop the land that it owns around Japan's major cities, such as Tokyo and Osaka. The largest of these projects and the most attractive in terms of profitability is the development of the Shiodome area (formerly a freight car lot covering over 22 hectares) which neighbors the Ginza-Shimbashi area in the heart of Tokyo. This is a multi-faceted redevelopment plan of more than 100 hectares of floor space that will incorporate office, hotel, commercial and housing facilities. Construction on the project is scheduled to begin in two or three years and the area is expected to be open for business around the year 2000. Since the JNR Settlement Corporation is restricted by law to only managing the disposal of its land and stock holdings and is prohibited from engaging directly in real estate business, it will establish a real estate development subsidiary for the project using the Shiodome property as its source of capital. (The JNR Settlement Corporation will issue corporate bonds convertible into the shares, as was previously mentioned.) Although this project remains economically quite attractive, the downturn of the Japanese economy has produced a weakening in corporate office market. As a result, the future prospects for this project must not be viewed overly optimistically.

Table IV-8 Sale of Fixed Assets (Yearly)

(US\$ millions)

	Open Bidding	Contract Without Bidding	Total
FY1987	163.8	857.6	1,021.4
FY1988	216.2	1,352.7	1,568.9
FY1989	283.8	1,854.4	2,129.2
FY1990	179.2	6,061.6	6,240.8

Source: White Paper on Transport

4.108 Table IV-9 shows the present state of obligations for which the JNR Settlement Corporation is responsible. The debt outstanding at the end of FY1990 is \$165.4 billion (¥21.5 trillion). This figure does not include pension and other liabilities to be incurred in successive years [\$36.2 billion (¥4.7 trillion)]. Liabilities fell by \$4.6 billion in FY1990 because: there was a large increase in revenue from the sale of real estate, primarily as a result of the issuance of loans convertible into real estate, and the transfer to the Government of the Corporation's capital share in the Metropolitan Rapid Transit Authority. As is evident from this table, each year it is necessary to dispose of assets larger in value than the sum total of actual pension, other accrual payments, and the interest payable on the existing debts for that year. Therefore, with the resumption of open bids which is planned for FY1992, sales of real estate valued at \$9 billion (¥1.17 trillion) are expected.

Table IV-9 Current Liabilities of JNR Settlement Corporation

(US\$ billions)

	Liabilities	Notes
Beginning of FY1987	139.2	(Breakdown) JNR debts—129.3; Three Island Fund 10.0.
End of FY1987	156.9	(Reason for increase) Seikan Undersea Tunnel 8.5; interest & others 10.2.
End of FY1988	170.8	(Reason for increase) Honshu Shikoku Bridge 4.6; pension liabilities 4.6; interest 6.4.
End of FY1989	170.0	(Reason for increase) interest & others 6.7. (Reason for decrease) early reimbursement from Shinkansen Holding Corporation 5.4.
End of FY1990	165.4	(Reason for decrease) Sale of assets 6.2; transfer of equity shares 7.2.

Source: White Paper on Transport

4.109 The 1991 budget called for the sale of the 2 million shares of the three passenger railway companies on Honshu for a total of \$1.2 billion [budgetary figure of Y150.4 billion at Y75,178 per share (face value + capital reserve per share)]. However, the initial public offering was postponed until FY 1992 because of the sluggish stock market. In order to list the JR's shares on the Tokyo Stock Exchange and introduce them for sale in FY 1992, the JNR Settlement Corporation must first be advised by the Asset Disposition Council on many regulations relating to the sale and listing of the shares. One such case is the three passenger railway companies on Honshu that have already met the Tokyo Stock Exchange listing standards. After obtaining the advice of the Asset Disposition Council and reviewing market conditions, the Government and the JNR Settlement Corporation plan to list the stocks of the three passenger railway companies on Honshu for sale this fiscal year. Since the stock of these three companies will total approximately eight million shares, the sale of these shares will be divided into annual lots of approaching two million shares each. It is expected to take close to four years to complete the sales.

4.110 The freight company has not yet achieved the specified profit level and paid out the dividends that are among the listing standards requirements. As shown in Table IV-6, however, the current profit level is nearing the required level, and it is forecast that the company will meet the listing standards and be able to sell shares within the next few years.

4.111 The earning structures of the three island companies are weak and they are able to produce profits only due to the revenue assistance they receive from management stabilizing funds. As can be seen in Table IV-6 which illustrates the ability of each of the island companies to meet the listing standards, JR Shikoku has already met the profit standard but the other two companies have not due to the vulnerability of their profit bases. Nevertheless, all three of the island companies are working to satisfy the listing standards and sell their shares within a few years. This group includes even JR Hokkaido, the least profitable of the three, which is reportedly planning to pay out dividends of 10% in March 1995 in preparation for the listing of its shares.

4.112 Of the inherited liabilities of the JNR Settlement Corporation, \$106.2 billion (¥13.8 trillion) was expected to be born by the public. The sharp rise in the price of real estate after 1987, however, has roughly doubled the price of disposable plots. Furthermore, the market value of the stocks of all the companies concerned are likely to reach about 10 times their face value (private railway stocks have reached at least that much). Thus the possibility exists that the value of funds to be used as repayment will increase much more rapidly than expected. This would mean, in turn, that the public's burden might decline to a level of approximately \$50 billion. However, the crucial factor in reducing the public's liability will be the steady annual disposal of assets of an amount that exceeds the interest on the inherited debt and other accruing liabilities.

D. Valuation and Pricing of Newly Created Companies

4.113 In May 1991, a group of knowledgeable persons which had been brought together from many sectors of the society produced a report entitled "Views Concerning the Sale of JR Stock" and submitted it to the Minister of Transport. The main points included in this report are:

- (a) In order to complete the privatization of the JRs and redeem their long-term liabilities, it is necessary to sell their shares as soon as the various requirements for listing are met.
- (b) Prices should be set in a fair manner and the opportunity to purchase stocks should be made available to as wide a range of the public as possible. Thus, it is imperative that the sale of these shares be carried out in as uncomplicated a manner as possible. In particular, it would be appropriate

to determine the sale price of shares by putting a portion of them up for auction and subsequently relying on a lottery to sell the remaining shares at a fair price.

- (c) Because the number of shares to be sold is substantial, market trends and the proper disclosure of information must be provided for.
- (d) Since the stock market remains unstable, market trends for the coming years must be forecast as completely as possible and responses must be flexible.

4.114 Since the sale of JR stock represents the disposal of important assets, the timing and other aspects of their disposal will be studied by the Asset Disposal Council. One possible method for determining the value of stocks at that time would be the comparable company method. This method uses a system for determining net asset value similar to that employed in evaluating the value of capital shares of subways.

4.115 Under this method, a listed company similar to the one to be publicly offered is selected, and the per-share dividends, profits, and net worth of the two companies are compared in order to arrive at a fair stock price. The initial price is further adjusted by taking into account market conditions. This adjusted price becomes the price at which the stock is eventually offered. As a general rule, when selecting comparable companies, at least one of the companies selected must be already listed on the stock exchange.

(Basic formula for computation)

$$X = P \times \frac{(A'/A) + (B'/B) + (C'/C)}{3}$$

X: Stock in the company to be listed (JR)

P: Stock price of a comparable company (such as a private railway)

A: Dividend; B: After-tax profit; C: Net assets (of the comparable company)

A': Dividend; B': After-tax profit; C': Net assets (of the company to be listed)

4.116 As stated, however, an open bid would be used in establishing the sales price, as in the listing of NTT stock. Therefore, unlike the listing of stock by public offer, the problem of "pricing," or letting a securities company set the selling price, does not arise.

V. AN EVALUATION OF JNR RESTRUCTURING FOR PRIVATIZATION

A. Performance Before and After Restructuring

5.1 The total performance (transport volume and profits) of the six newly created passenger railway companies and the freight company (the JRs) has been considerably better than that of JNR. It has, in fact, greatly exceeded the standards set by the Supervisory Committee before the restructuring of JNR. As a result, the repayment of the liabilities assumed by the JRs has been progressing well.

5.2 Government subsidies have declined substantially and the JRs are paying large sums in corporate taxes, thereby contributing to government finances.

5.3 In addition to these quantitative changes, other changes have occurred such as improvements in the quality of service and aggressive business diversification. These changes have served to enhance customer satisfaction with the JRs and have helped to transform the unfavorable image that the railways had during the JNR era into a more favorable one.

A1. Changes in Economic Efficiency

(Expansion in Transport Volume)

5.4 The business activities of the JRs are considerably more vigorous than they were before restructuring. Passenger volume carried by the six passenger railway companies (in person-kilometers) has been increasing at an average annual rate of 5%, much higher than that during the last years of JNR operation. This growth rate is higher than that of the private railways, which had experienced higher growth rates than JNR before restructuring.

5.5 The transport volume of the freight railway company (in ton-kilometers) is also remarkable when compared with that of JNR. Whereas the volume of freight carried by JNR declined consistently throughout the first half of the 1980s, the volume carried by the JR Freight Railway Company has grown at a rate of 10% per year since 1987.

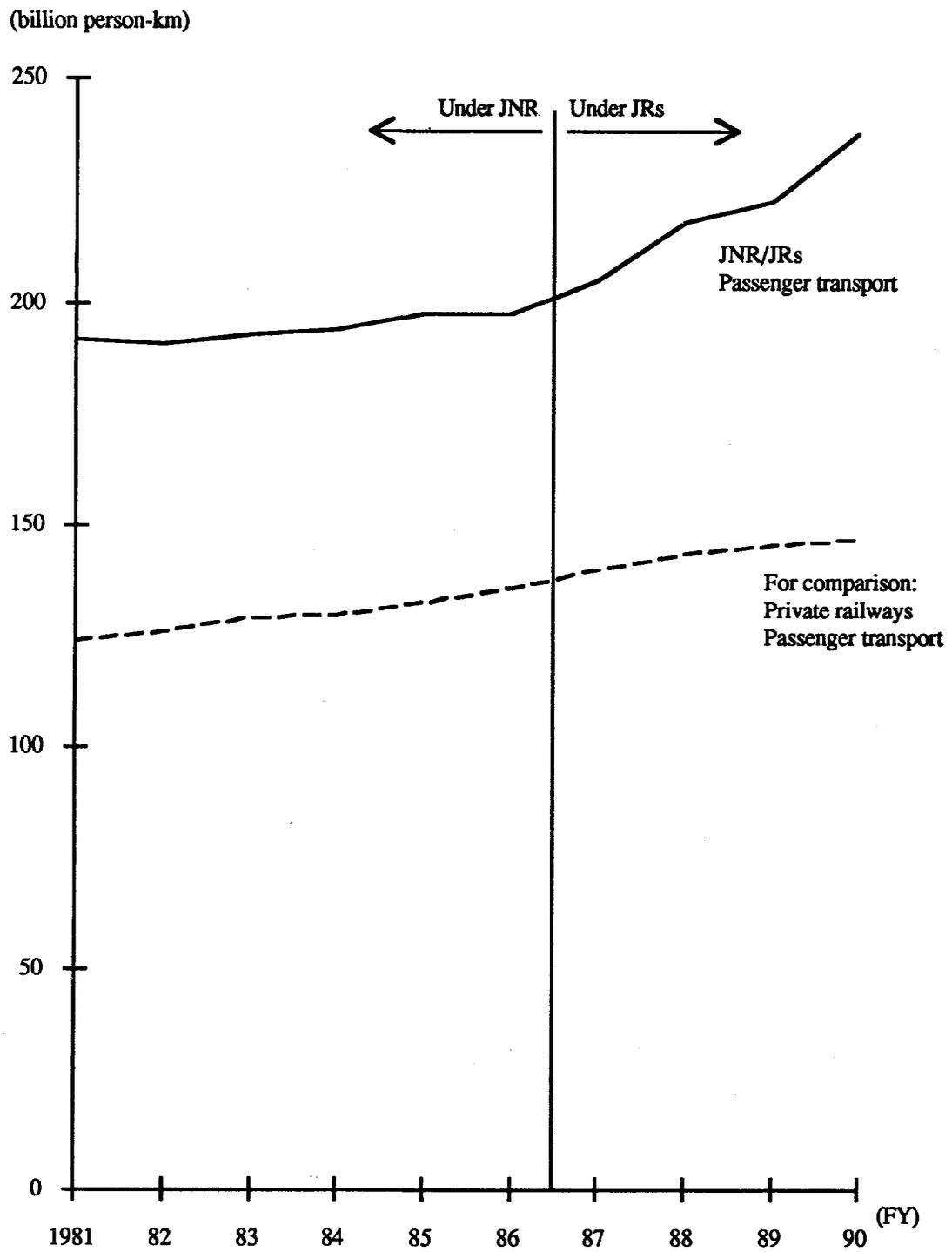
(Raising Operating Revenues)

5.6 Reflecting the expansion in transport volume, the operating revenues of JRs have shown a strong average annual growth rate of 6.2%. This is higher than the JNR's average annual growth rate of 3.8% in last five years. It should be noted that, whereas JNR increased its fares from 3% to 10% almost every year, the JRs have not made any increase. The 3% increase in 1989 was due to the introduction of the consumption tax.

(Cost Reduction)

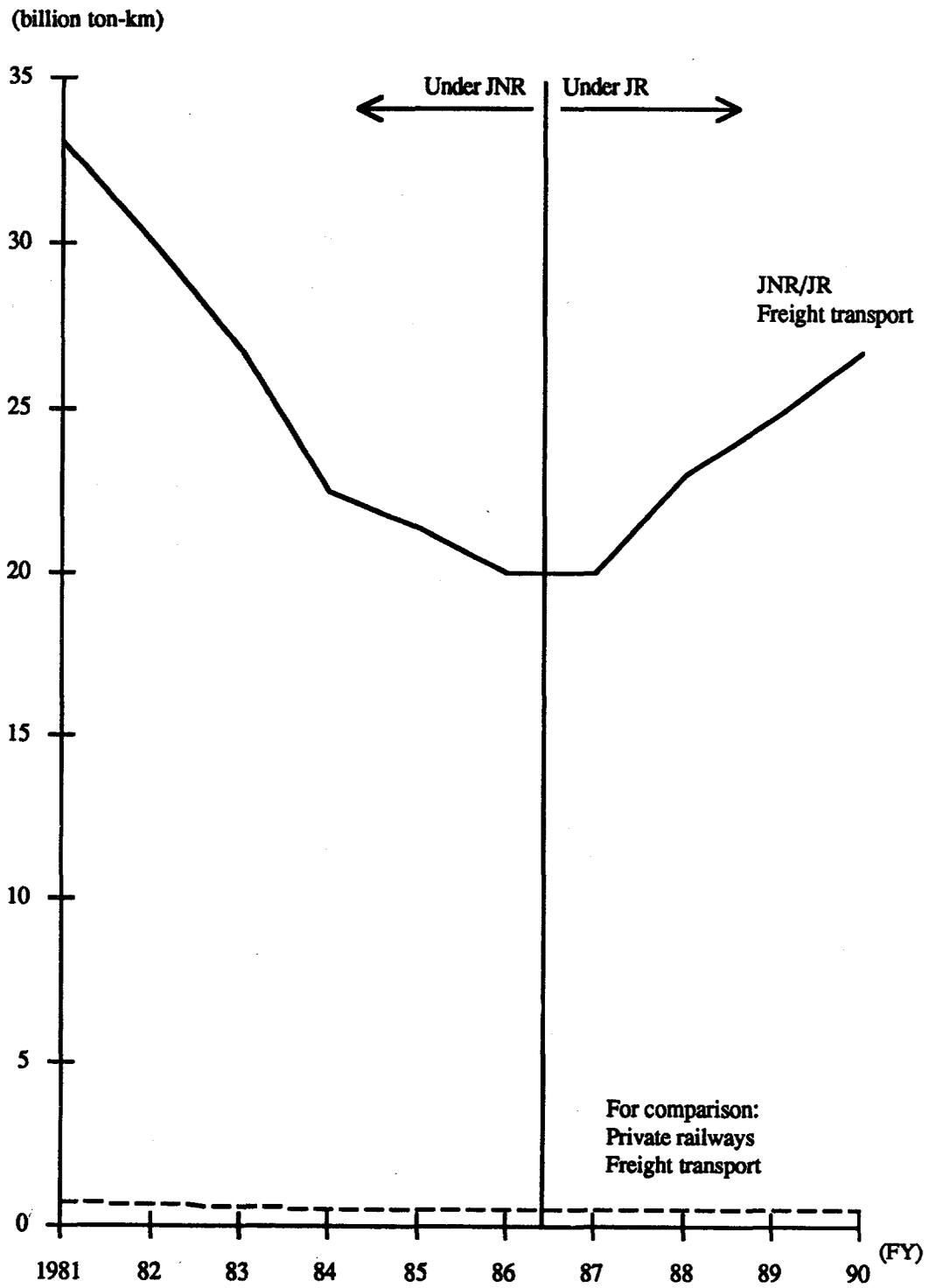
5.7 The JRs are striving to reduce costs. As a result, JRs operating expenses per car-operation kilometer (cost per kilometer of one passenger car operation), the basic unit for evaluating operating expenses, are much lower than those of JNR, which had usually increased each year.

Figure V-1 Passenger Transport Volume of JNR and JRs



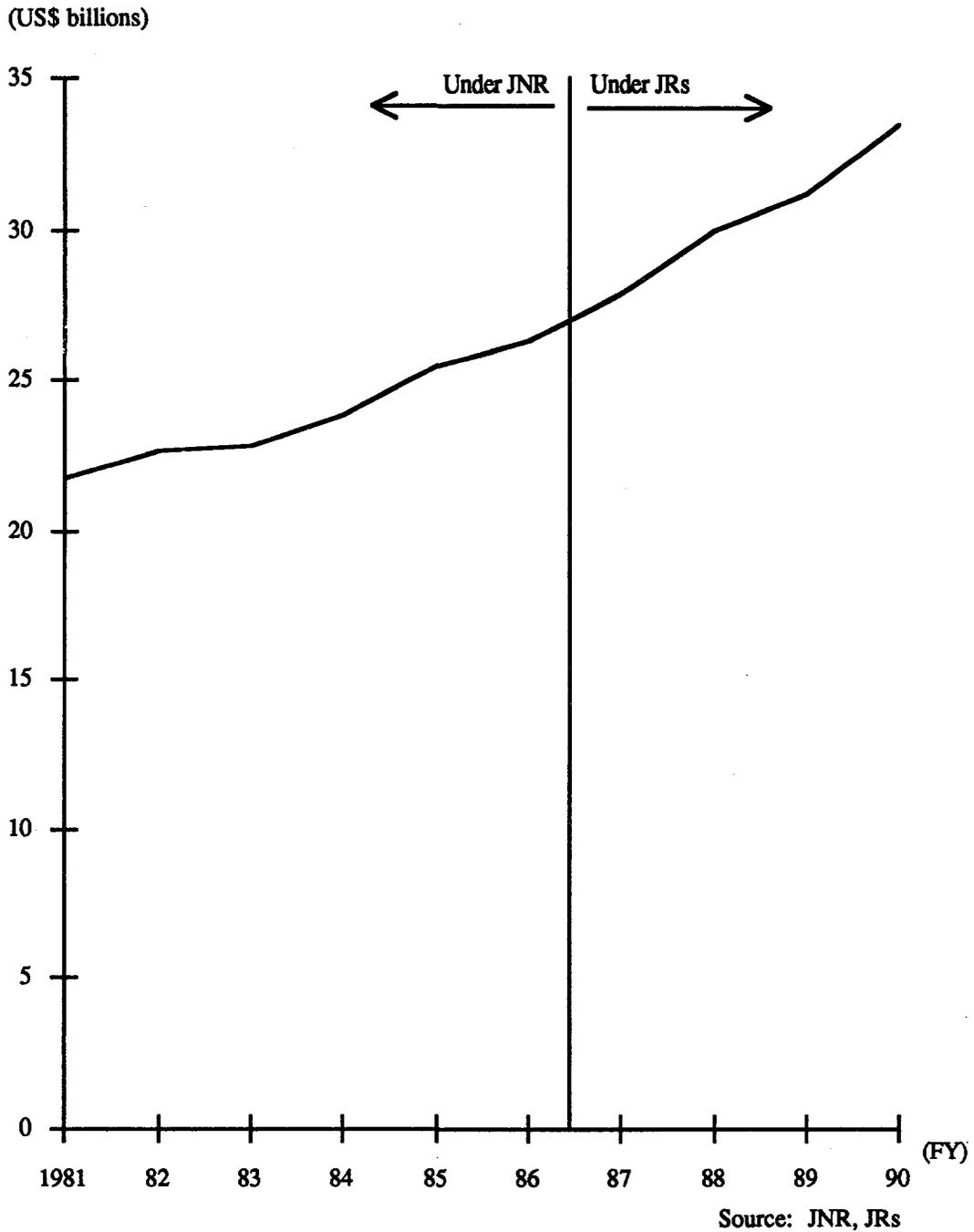
Source: Ministry of Transport

Figure V-2 Freight Transport Volume of JNR and JR



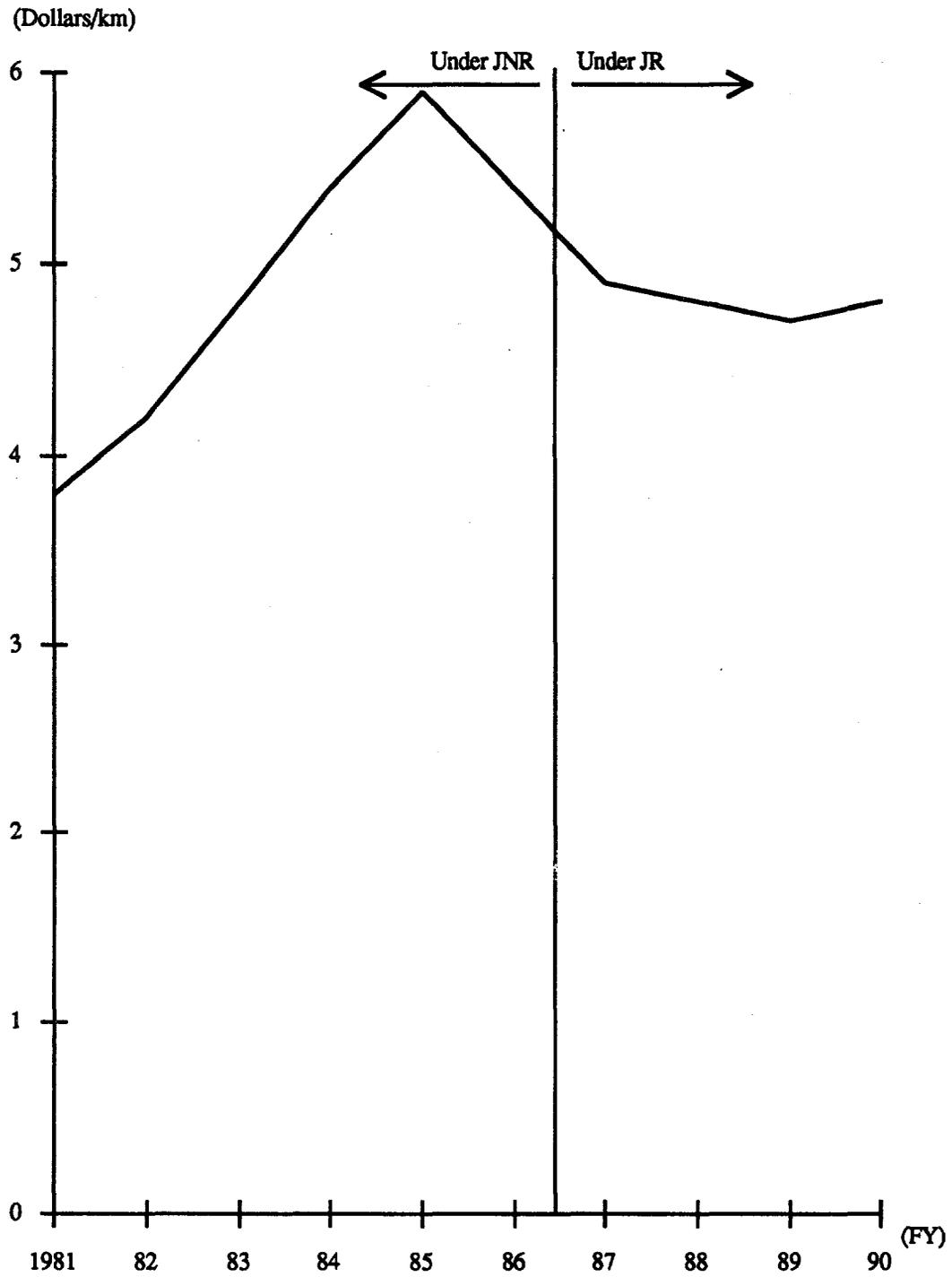
Source: Ministry of Transport

Figure V-3 Operating Revenue of JNR and JRs



Note: In order to maintain consistency, the figures included for JNR's operating revenue represent the total amount of revenue remaining after the subsidy for loss has been deducted.

Figure V-4 Operating Costs Per Kilometer of Passenger & Freight Car Operation



Source: Ministry of Transport, JNR, JRs

(Improvement of Productivity)

5.8 Growth in transport volume and revenues has been achieved along with the improved efficiency of the work force. The labor productivity of the JRs is far higher than that of JNR. This is demonstrated by such indices as the transport volume and operating revenue generated per employee. JNR's labor productivity was less than half that of the private railways. In contrast, the transport volume of the JRs has reached a level nearly on a par with that of the private railway companies. Prior to the restructuring of JNR, its labor productivity had already been improving because of decreases in members. The number of employees dropped by 177,000 during a five year period (from 401,000 in 1981 to 224,000 in 1986). Because of the recommendations of the Supervisory Committee, the JNR suspended new recruitment as part of a deliberate streamlining of its work force. This is a step that would not have occurred outside the context of the move towards privatization.

(Increase in Profits)

5.9 As a result of increased transport volume and improvements in operational efficiency, the JRs made \$1.168 billion (152 billion yen) in current profits in their first year (FY1987). Their profits have increased every year since then, quadrupling the estimates of the Supervisory Committee.

(Reduction in Liabilities)

5.10 In addition to attaining substantial profits, JRs have paid off part of their debts and their financial conditions have improved. By the end of FY1990, JRs' long-term liabilities had been reduced from \$36 billion (¥4.7 trillion, exclusive of future liabilities) to \$27 billion (¥3.5 trillion), or three quarters of the original total amount.

A2. Changes in Fiscal Burden

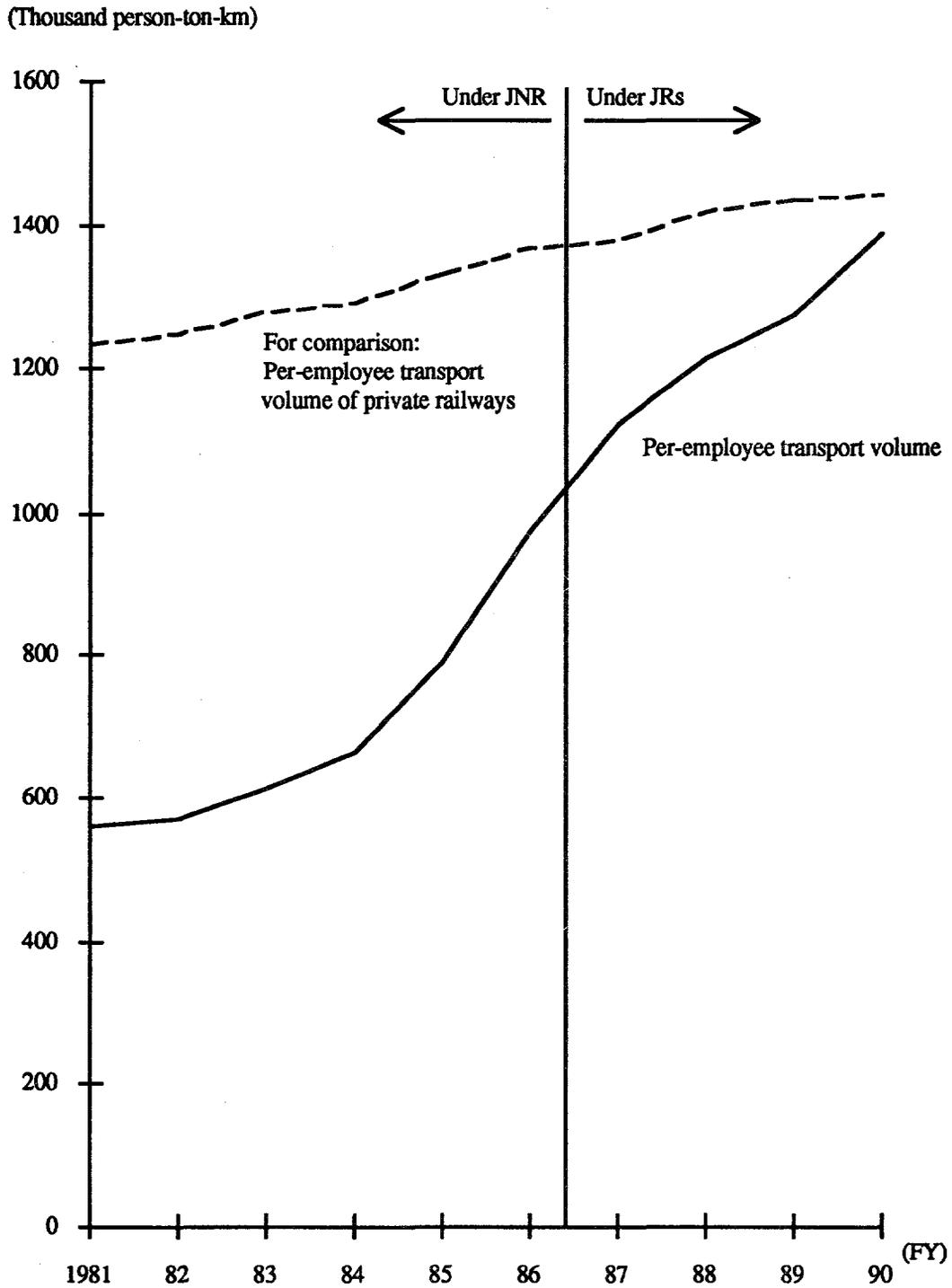
(Reduction of Subsidies)

5.11 The government's financial burden associated with the JRs has been drastically reduced compared with that for JNR. The amount of subsidies to cover special construction costs (subsidies which are also provided to private railways) and those granted when inefficient remote transportation routes are separated from JRs or converted to bus transport, is minuscule when compared to the amount of subsidization required during the JNR years. Indeed, the JNR Settlement Corporation, which assumed most of JNR's liabilities, has been unable to sell off as many of its assets as originally expected and requires government financing to cover its losses.

5.12 Nevertheless, even if the subsidies to the JNR Settlement Corporation are included, the Government's fiscal burden after restructuring is still much lighter than before. Furthermore, the net fiscal burden is even lighter if one takes into consideration the fact that JRs are paying corporate taxes from their profits.

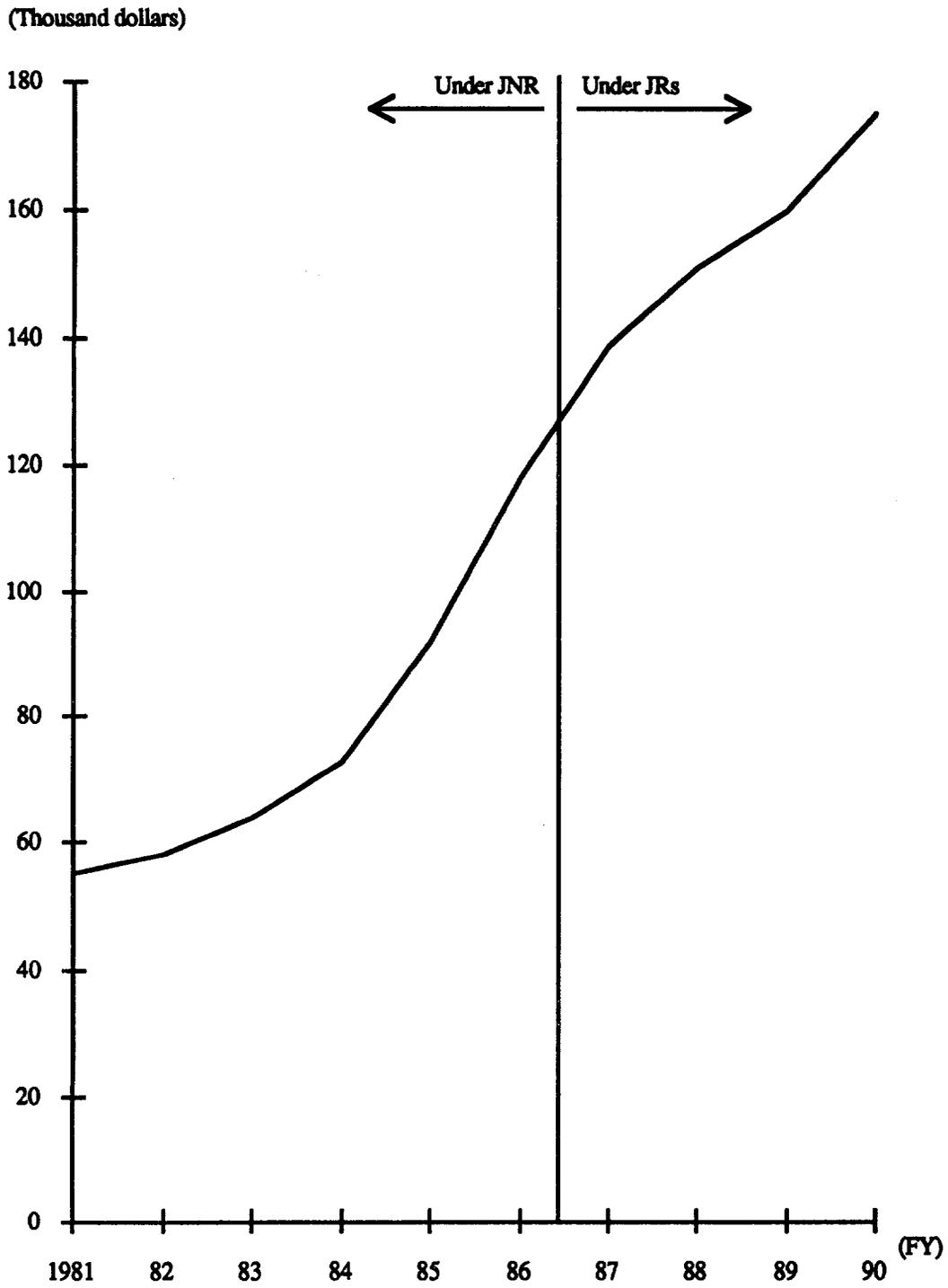
(Note: Because the JNR Settlement Corporation carries liabilities in addition to those of JNR, some subsidies to the Corporation are for conditions that did not exist in the JNR years.)

Figure V-5 Labor Productivity (Transport Volume Per Employee)



Note: Labor productivity began to increase from 1982 due to the prior restructuring.

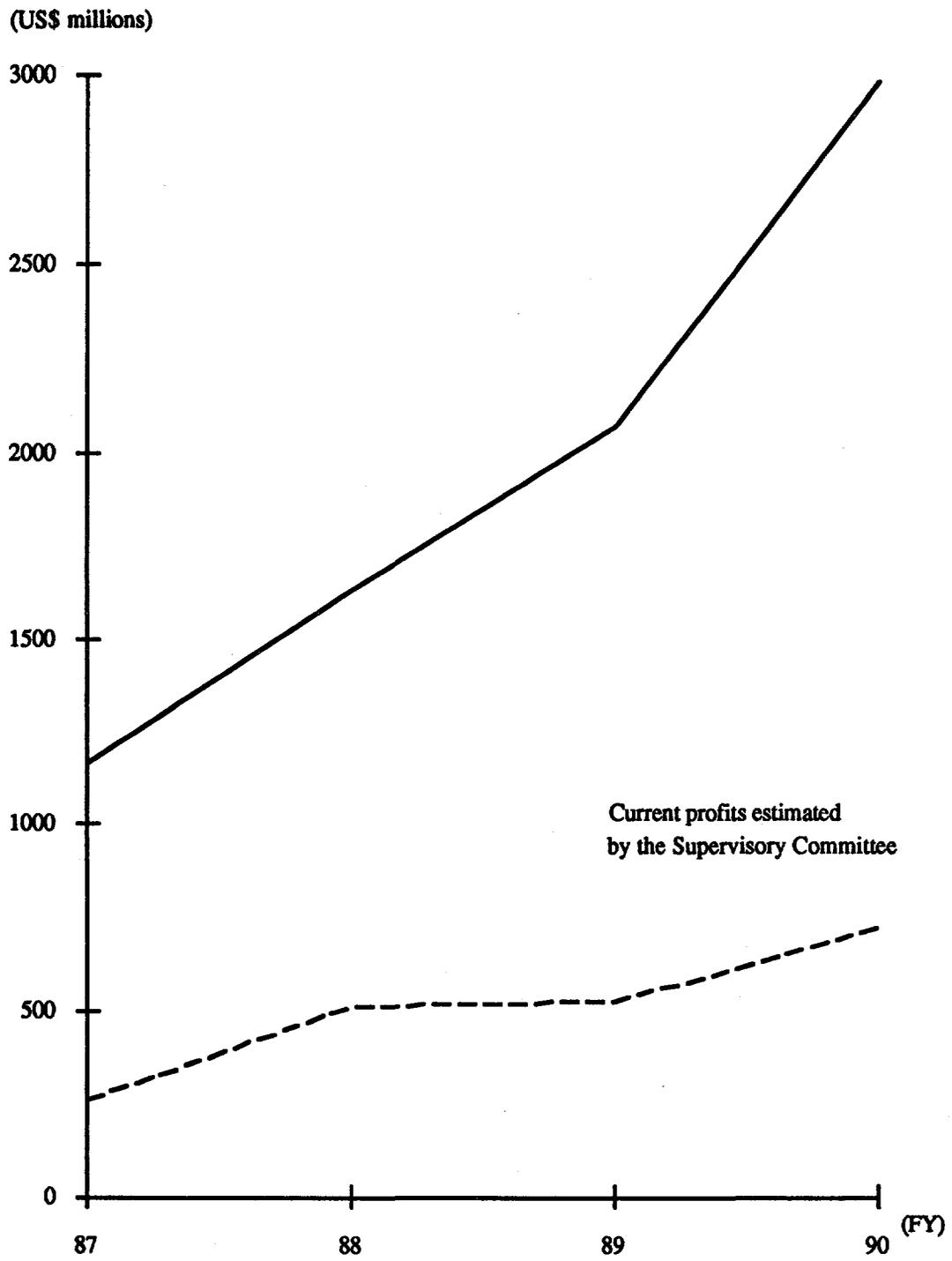
Figure V-6 Labor Productivity (Operating Revenue Per Employee)



Source: JNR, JRs, Ministry of Transport

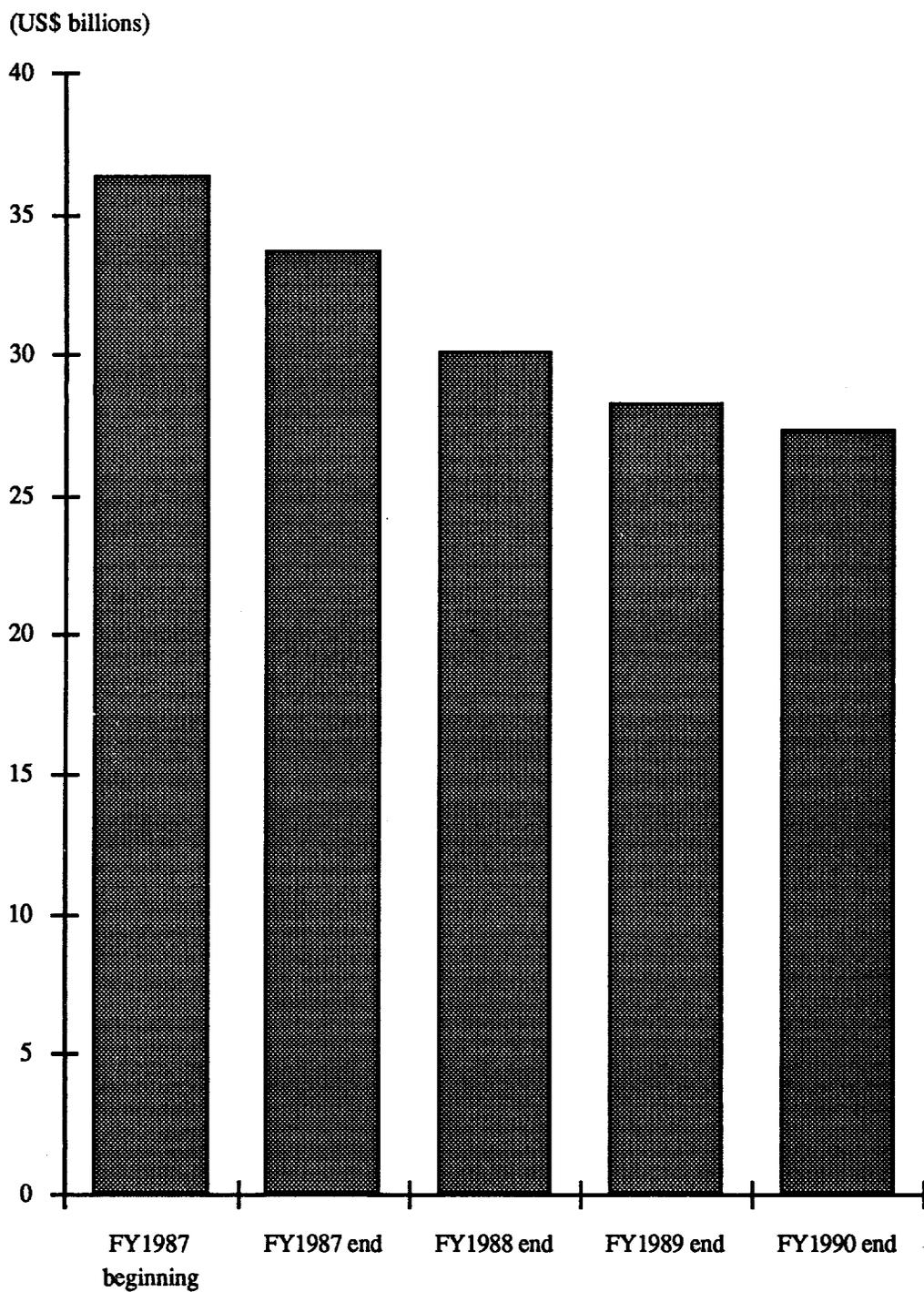
Note: Labor productivity began to increase from 1982 due to the prior restructuring

Figure V-7 Current Profit of JRs



Source: JRs Supervisory Committee

Figure V-8 Long-Term Liabilities of the JRs



Source: JRs

Note: Figures are exclusive of future liabilities
Figure FY1987 beginning is assumed JNR long-term liabilities.

Table V-1 Subsidies and Corporate Taxes

(US\$ millions)

FY	Under JNR						Under JR			
	81	82	83	84	85	86	87	88	89	90
JNR (JRs) Subsidies (A)	5642	5611	5398	4980	4616	2905	206	116	170	48
JNR Settlement Corp. Subsidies (B)	-	-	-	-	-	-	1283	1502	4692*	1162
Corporate taxes paid (C)	-	-	-	-	-	-	812	1011	994	1196
(A)+(B)-(C)	5642	5611	5398	4980	4616	2905	677	607	3868	14

* The temporary increase in subsidies for the figure marked with an asterisk is the result of a special measure concerning pensions.

Source: The JRs, Ministry of Finance

A3. Other Changes

(Improvement in Quality of Service)

5.13 Each of the JRs is making efforts to improve the quality of service in order to enhance customer satisfaction, something rarely attempted by JNR. In fact, these impressive results of the privatization process have convinced people that the JNR break-up and privatization were the right decision.

5.14 The passenger railway companies have made many transport service improvements, such as the increased frequency and speedups of trains. They have also upgraded services through improved station facilities (buildings and rest rooms), and through the introduction of new types of passenger cars. Marketing improvements such as discount tickets have also been introduced. Employee attitudes toward customers have improved markedly, for example, the employees' expressions of thanks at the ticket windows and their greetings to passengers at the wickets in the mornings and evenings. All these measures have greatly enhanced passenger service.

5.15 The freight railway company is meeting the needs of shippers better than its predecessor JNR through the opening of new routes, setting of optimal departure and arrival schedules, speedups, and the development of new transport systems.

(Pegging of Fares)

5.16 Whereas JNR raised fares approximately every year starting in 1975, the JRs have rarely increased their fares. As a result, the fare differentials are narrowing between the JRs and the private railway companies competing in urban areas.

Table V-2 Rates of Fare Increase

(Unit: %)

FY	Under JNR						Under JRs				
	1981	82	83	84	85	86	87	88	89	90	91
Passenger	9.7	6.1	-	8.2	4.4	4.8	-	-	2.9	-	-
Freight	9.7	6.3	-	4.2	3.1	-	-	-	3.0	-	-

Note: The fare increase in 1989 was due to the introduction of the consumption tax.

Source: JNR, JRs

Table V-3 Comparison with the Fares of Other Railways in Competing Routes

(Dollars)

Area	Carrier	1986	1991
Shinjuku-Hachioji (in Tokyo)	JNR, JR (A)	3.38	3.46
	Private railways (B)	2.23	2.62
Fare differential (A) - (B)		1.15	0.85

(Technology Development)

5.17 The Railway Technical Research Institute, which became an independent organization in charge of the railway technology development activities of JNR, is making progress in technology development. For instance, it has succeeded in improving the performance of the Shinkansen super-express trains, something not attempted in JNR days, and in developing a mini-Shinkansen that employs a new system using conventional rail lines. Further, a "linear motor Shinkansen" employing magnetic levitation is being developed and an experimental line is under construction as a step toward commercialization.

5.18 Each of the JRs is striving to develop new types of passenger cars and to improve vehicle performance. Examples include the introduction of specialized passenger cars with deluxe furnishings for resort areas and speedups of inter-city trains for business travelers. These improvements, fine-tuned to match the special needs of each individual line, were rarely attempted by the overly centralized JNR.

(Subsidiaries and Related Businesses)

5.19 During the JNR years, related businesses were classified into those having JNR equity investment based on the JNR Law and other ancillary businesses. The former included consignment businesses (ticket sales by agents, passenger car maintenance, and data processing services); transport-related businesses (seaside railroads, bus terminal facilities, and warehouses and terminals for distribution); and asset-utilizing businesses (recreation facilities, advertising, and land development and utilization). The latter category consisted primarily of businesses conducted inside stations and passenger cars and the leasing of land and space under elevated railroads. The scope of these businesses gradually

expanded in response to environmental changes. Before restructuring, JNR had to obtain approval or permission from the Minister of Transport concerning the investment or leasing of important assets for related businesses. Also, they were subject to restrictions imposed by JNR's own internal regulations and other rules.

5.20 When the privatization process was carried out, related businesses were also divided and subsequently taken over by the six new passenger railways companies and the freight railway. Legal restrictions were considerably reduced. Some requirements remain, such as approval by the Minister of Transport for the transfer or collateralization of important assets, as due requirements to pay consideration to local medium-sized and small enterprises. Resultingly, the number of subsidiaries of the six passenger railway companies climbed from about 90 before restructuring to more than 170 over the past several years. Each company is also striving to expand its related businesses. In comparison with large private railway companies, however, the proportion of revenues accruing from these businesses in total revenues is still low (in FY1990, 3% on average for the six passenger railways, versus 40% for the largest 15 private railways). Thus the promotion of these businesses, and the fostering of their subsidiaries, remains an important managerial theme.

B. Reasons for Improvement

5.21 These changes cited above are thought to have been brought about by the privatization process along with external factors. The former include the corporatization and division of JNR, the change of its institutional framework, and deregulation. The latter refers to the country's macroeconomic environment and takes into account earlier restructuring carried out during the JNR years.

B1. Corporatization and Division

5.22 The corporate form of the public railway corporation was changed from that of a public corporation to that of a private stock company. It was also further divided into a freight transport division and a passenger transport division. The passenger transport division was further divided into regional segments.

5.23 The basic change was from corporate enterprise to private corporate management. The profit motive was introduced. The management principles of JNR had not included taking positive initiatives towards increasing profits. Instead, political maneuvering resulted in the construction and maintenance of unprofitable lines and the continuation of insupportable employment levels. Through privatization and division, JNR was transformed from one large non-reactive public entity into private companies with profit maximization as their management principle. Although the stocks of these individual companies are owned by the Government, their eventual sale to the public has already been planned. The management and employees of the JRs, the Government, and the general public all have come to support the transportation sector's new philosophy of pursuit of profit.

5.24 The break up of JNR created companies of a scale that made effective managerial control possible and enabled management to attune itself to the needs of local communities. (The JRs, which even after restructuring, still have a total of 200,000 employees.) First, a style of management capable of skillfully responding to the needs of local communities would have been difficult as long as ultimate decision-making authority remained concentrated in the central office, even with branch offices supporting it. This is evidenced in the previous failures of the branch office system in the JNR years. Second, the break up of JNR into the smaller JR companies effectively created competition among themselves.

5.25 Since the Government effectively owns 100% of the railroads' stock shares, the JRs are currently state-owned enterprises (SOEs). Yet the privatization program calls for

these shares to be sold to the public. In that sense, it is notable that the JRs are fundamentally different from simple state-owned enterprises in these ways:

- (a) First, the desire to participate in lucrative fund-raising on the capital markets (made possible by listing on the stock market) and to attain managerial freedom independent of government restraints (made possible by general public ownership of shares) creates an incentive to raise profits to meet the standards required for stock market listing. If the Government were to hold JRs' stocks permanently, the incentive to raise profits would not materialize.
- (b) Second, this desire to join the capital markets also eliminates the incentive for the Government to be an owner of JRs or to be tempted to use it as a political tool. Instead, to facilitate the repayment of liabilities by the JNR Settlement Corporation, the Government is counting on the JRs to increase their profits so that the future sale price of the shares will be higher.
- (c) In other words, the scheduled sale of the shares means that the pursuit of profit has become the supreme goal for both the owners and managers of the JRs. The five reconstruction programs implemented in the JNR years were rationalization programs that, without the expectation of future stock sales, remained part of the old Government-owned public corporate system (and, in fact, all of these programs failed). The creation of private stock companies with stock eligible to be sold on the market is contradictory to the structure of the JNR and the reconstruction programs which endeavored to save it.

B2. Change of Institutional Framework

5.26 The transition from JNR to the JRs was not simply a facile switch to a different corporate form. It was a thorough restructuring which was planned for in great detail.

5.27 First, the corporatized JRs were scheduled to assume only as much of the JNR liabilities and personnel that they could reasonably be expected to bear. The rest was transferred to the JNR Settlement Corporation. By removing the excess burden of the past of JNR, the JRs were initially established as healthy concerns. Additionally, the JRs independence from JNR liabilities made the future market listing of stock shares possible and paved the way for the development of the JRs as profitable organizations appropriate for investment.

5.28 Second, the three passenger companies which have weaker operational basis were not forced to assume any liabilities. Moreover, funds (Management Stabilizing Funds) were established to serve as a reserve to compensate them for losses. As for the freight company, cost reduction was achieved through the low-cost leasing of railway equipment and facilities from the passenger companies. These measures were designed to support the freight railway business and low-profit local lines (which JNR had propped up through its cross-subsidization system) even after they gained independence through the restructuring process.

B3. Deregulation

5.29 The privatization process erased the restrictions previously placed on JNR as a government-owned public corporation. As a rule, the JRs are only subject to those restrictions that the private railway companies are subject to, namely, those contained in the Railway Business Law. However, at present, the JRs are still state-owned enterprises (SOEs) and therefore are required to obtain approval for certain business activities that are

not typical of private railway companies. Nevertheless, these restrictions are far more lenient than structure under which JNR operated. The range of businesses permissible for JNR was specified by law, and it was therefore difficult for JNR to undertake activities not related to railroading. The JR's, once they receive the approval of the Government, can expand the scope of their business ventures with relative ease, regardless of whether these ventures have any direct connection with railroading. The JR's' budgets do not have to be confirmed by the Diet and their business plans are removed from the many troublesome political maneuvering which often interfered in the past.

5.30 What all this signifies is that the JR's have been given the autonomy to devise their own management plans, something not extended to JNR. It also means they enjoy a far greater range of profitable management strategy options.

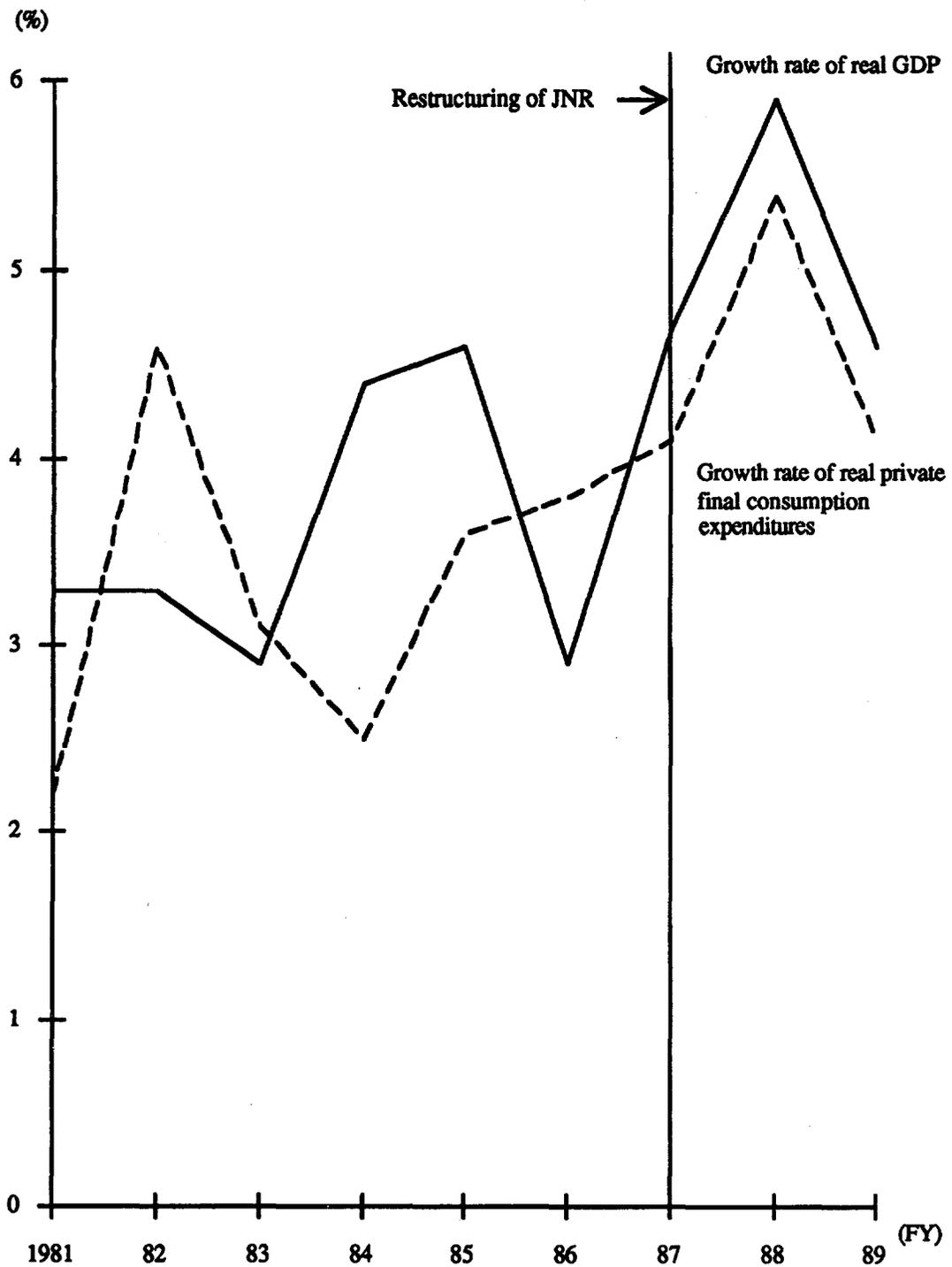
B4. Macroeconomic Environment

5.31 The domestic economy of Japan has grown substantially since the fall of 1986. The real rate of growth in GDP (Gross Domestic Product), which had an average annual rate of 3.6% in the last years of JNR (1982-86), rose to 5.1% in the early JR years (1987-89). As the economy has grown, transportation activities have increased. Transportation volumes for automobiles, airplanes, buses, and other means posted unprecedented growth in the second half of the 1980s. Thus the JR's enjoyed a favorable market demand situation from the outset of their establishment.

B5. Prior Restructuring

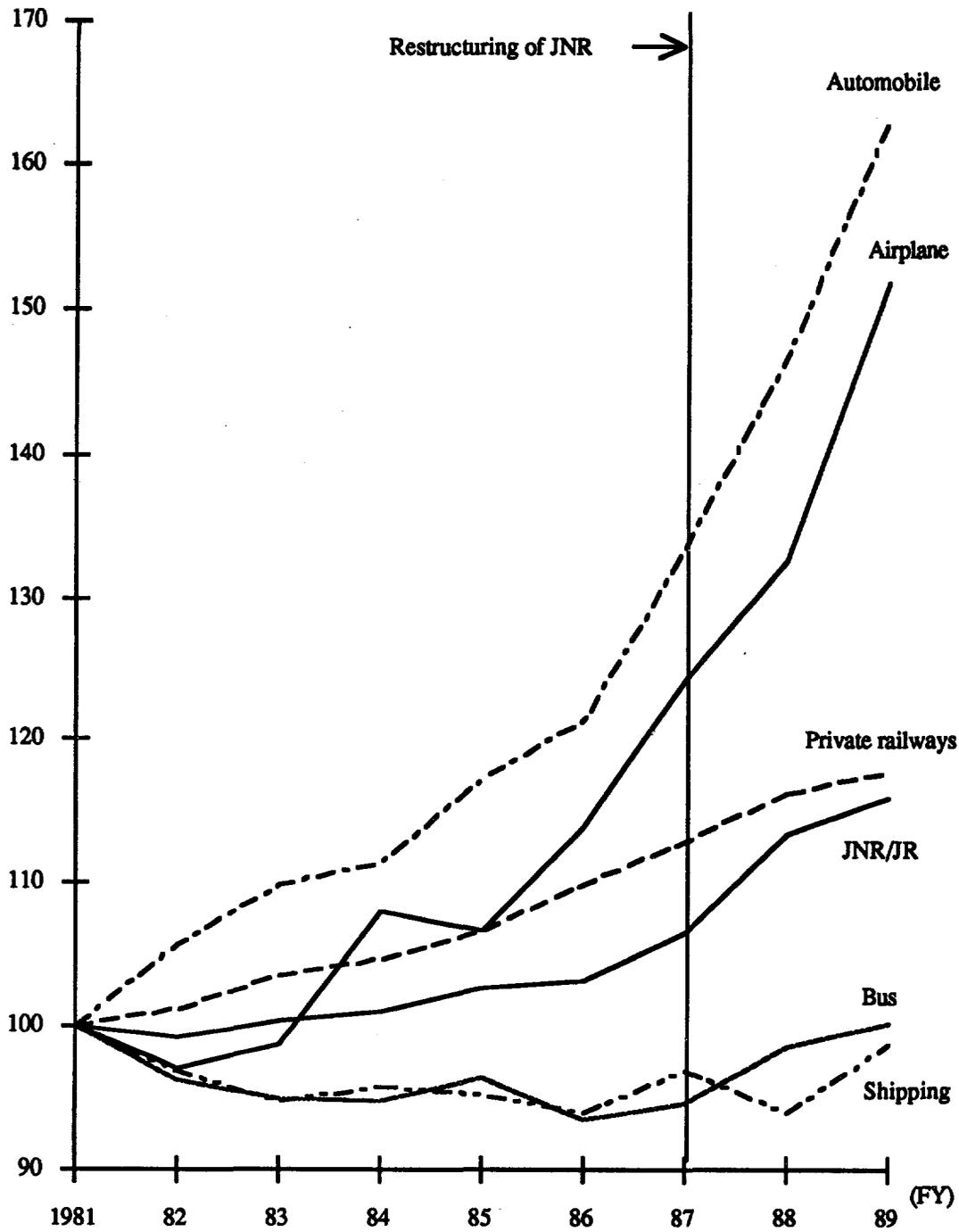
5.32 During the restructuring conducted before the privatization process of the JNR, a massive reduction of the work force was achieved. The number of JNR employees plunged to 224,000 in fiscal 1986, the last year of JNR. This represents a reduction of 177,000 employees from 1981, when the Provisional Committee on Administrative Reform was inaugurated. This level of personnel rationalization would have been impossible had it not been premised on the coming privatization.

Figure V-9 Rate of Growth in GDP and Private Final Consumption Expenditures



Source: Economic Planning Agency

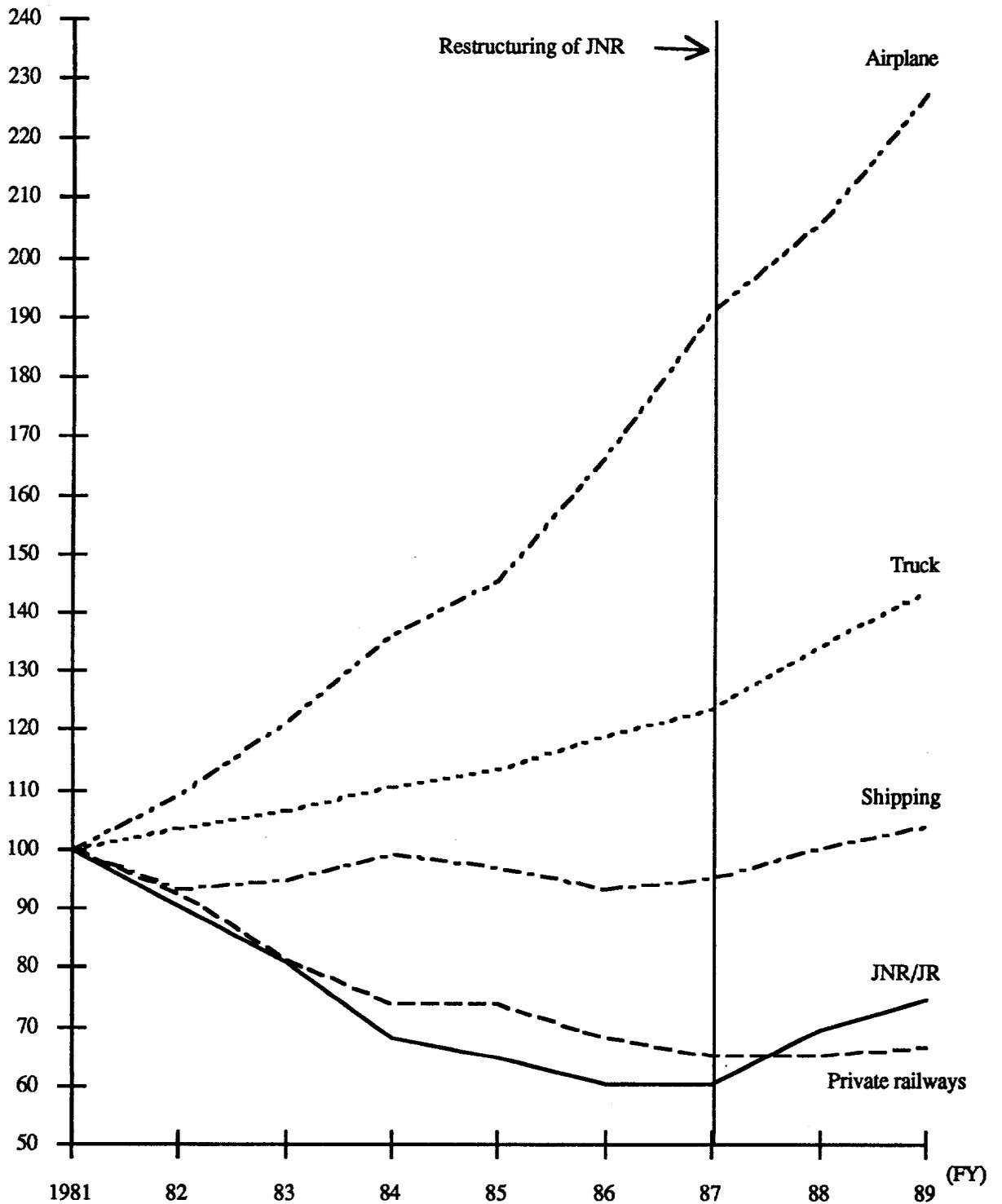
Figure V-10 Rate of Growth in Volume of Domestic Means of Transportation (Passenger)



Source: Ministry of Transport

Note: FY1981=100
 Figures are expressed in person-km.

Figure V-11 Rate of Growth in Volume of Domestic Means of Transportation (Freight)



Source: Ministry of Transport

Note: FY1981=100
 Figures are expressed in ton-km.

C. Assessment of Efficiency Gains

C1. Efficiency Gains by Privatization Process

(Main Factors contributed to the Efficiency Gains)

5.33 The satisfactory financial performance of the JRs impressed many observers with the privatization process. However, some critics contend that the JRs could have naturally become profitable once they were relieved of most of their liabilities and excess personnel. Others maintain that the favorable performance of the JRs has been due to external factors such as the increase in demand brought about by economic expansion. Still others emphasize the effects of the rationalization conducted in JNR's last years. Although these views partially explain the success of the JRs, they do not represent the entire picture. The following is a comprehensive summary of the factors that contributed to the improvement in the profitability of the JRs.

- (a) **Macroeconomic Environment:** Economic expansion resulted in increased transport volumes, which stimulated profit growth.
- (b) **The benefits of the privatization process:** Managerial effort by the JRs, stimulated by corporatization, contributed to the increase in transport volume and profits. The benefits of the privatization process are rooted in corporatization, division, and deregulation. However, since these three factors interact closely with one another, it is difficult to quantify the exact contribution of each.
- (c) **The change of institutional framework:** By passing part of JNR's liabilities and excess personnel onto the JNR Settlement Corporation, JRs' operating costs were reduced and profits were maximized.
- (d) **The effects of (rationalization) achieved in the prior restructuring process:** Through massive personnel rationalization, including reduction of about 177,000 employees in the last years of JNR, personnel costs were reduced even before restructuring. Since the rationalization was premised on the forthcoming privatization, this cost reduction can also be considered a benefit of privatization process.

(Method of Estimation: Contrafactual Analysis)

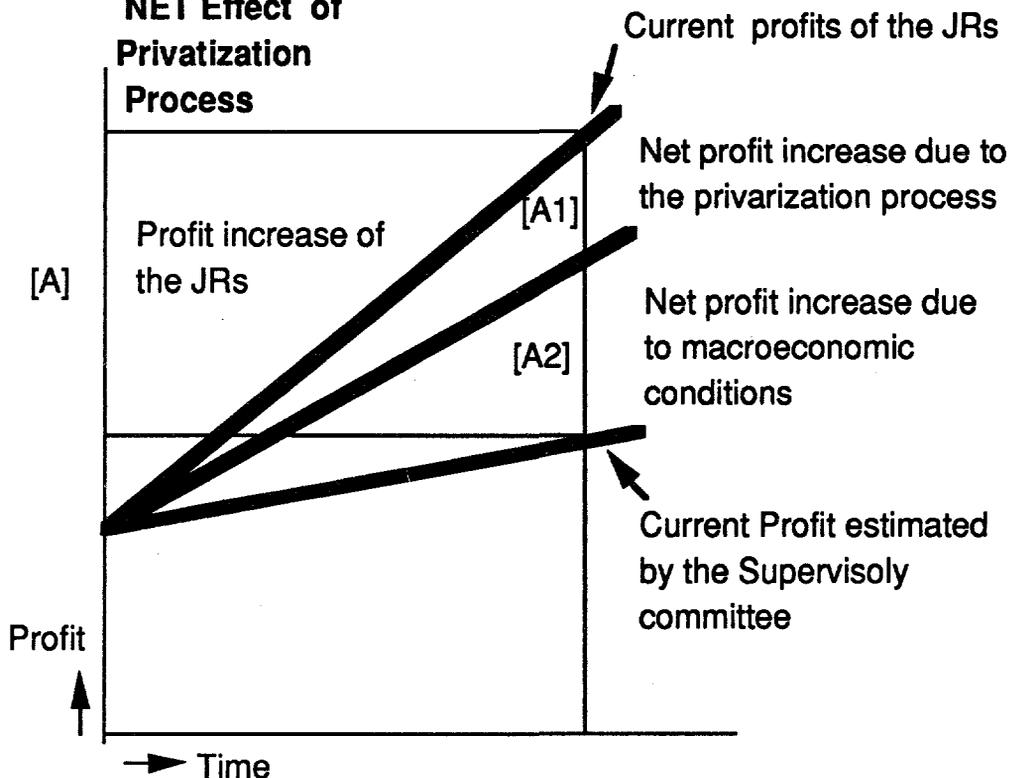
5.34 Among the above mentioned factors, (a) and (b) contributed to the increase in the JRs' revenue while (c) and (d) contributed to the decrease in costs. In order to clarify the efficiency gains due to the privatization process, one needs to calculate the amount of the increase in profits attributable to (a) and (b), as well as the amount of the decrease in costs attributable to (c) and (d). The calculation of the reduced costs due to (c) and (d) is shown in Paragraph 5.37. The amount of the increase in profits due to (a) and (b) can be obtained by calculating the difference between the actual amount of the JRs' profits with the level of the JRs' profits expected in the absence of these two factors. To determine the level of expected profits, one can use the profit plan for the JRs that was devised by the Supervisory Committee before the privatization process began: the profits plan provides an appropriate comparison because it assumes that no benefits accrued from the macroeconomic environment or privatization process, and thus we can presume that the increase in profits above and beyond the planned profits represents the net effect of favorable macroeconomic conditions and the privatization process.

5.35 The amount of the increase in the JRs' profits exceeding the planned profits can be seen, due to the three reasons stated below, as having been effected by the actual transport volume surpassing the transport volume assumed in the calculation of the planned profits. Accordingly, we can think of the amount of the increase in profits attributable to (a) and (b) as being in proportion to their respective contributions to the increase in transport volume.

- 1) The actual operating cost of the JRs was essentially the same as was assumed by the Supervisory Committee, and thus cost reduction is not a factor in increasing the profits of the JRs.
- 2) Since JRs have barely raised their fares, price effects are not present.
- 3) Given that the railways' operating costs are almost all fixed costs, one can think of the increase in marginal profits as being virtually a direct reflection of the increase in transport revenues brought about by the increase in transport volume.

5.36 It is almost impossible to quantitatively calculate the amount of the increase in profits attributable to factor (b). The amount of the increase in profits attributable to (b) is represented by the balance remaining after subtracting the amount attributable to factor (a) from the total amount by which the increase in the JRs' profits surpassed the planned profits. The relationship is shown in Figure V-12. For this calculation, we define the contribution made by economic expansion as the increase in transport volume which equals the increase in transport volume of private railway companies over the same period. (The transport volume refers to passenger traffic volume. We ignore freight traffic because it had only a minor influence.) To calculate the effects of economic expansion, we avoid the straightforward utilization of macroeconomic indicators, such as GDP growth rates, because it is difficult to accurately determine the correlation between these indicators and railway transport volume. It should be noted that our calculations conservatively estimate the effects of efforts made by the JRs' managements. We ascribe to economic expansion the amount of JRs' transport volume increase equivalent to that of the private railway companies, even though JNR was not able to reach the increases achieved by the private railway companies before 1987.

Figure V-12
NET Effect of
Privatization
Process



5.37 To estimate the effects of change in an institutional framework (i.e., consigning part of the liabilities and personnel to the JNR Settlement Corporation), we carried out a simulation calculation where the hypothetical costs that would arise in their absence. The difference between these costs and those of the Supervisory Committee's plan are considered the effects of institutional change. This difference grows each year because of the burden of interest payments arising from snowballing liabilities and increased personnel costs. The benefits of personnel rationalization resulting from prior restructuring are calculated as the present value of the extra personnel cost that would have occurred had rationalization not taken place.

(Results of Calculations)

5.38 The effects of the factors estimated under the assumptions described above are shown in Table V-4. For example, current profits in FY 1989--\$2.068 billion (¥269 billion)--surpassed the planned amount of \$525 million (68 billion yen) by \$1.543 billion (Table V-4[A]) (¥201 billion). Of these profits, \$967 million [A1] (¥126 billion) is estimated to be the outcome of macroeconomic expansion. The remaining \$576 million [A2] (¥75 billion) is seen as the increase resulting from the privatization process. On the other hand, the reduction in costs of the JRs resulting from the transfer of long-term liabilities and excess personnel to the JNR Settlement Corporation is judged to be \$10.317 billion [B] (¥1,341 billion). Of this amount, \$8.953 billion [B1] (¥1,164 billion) resulted from the transfer of liabilities and \$1.364 billion [B2] (¥177 billion) from personnel transfers. Thus, compared to a situation whereby restructuring for privatization is factored out, the increase in economic efficiency is estimated at \$10.9 billion--\$576 million + 10.317 billion [A2+B] (¥75 billion + ¥1,341 billion). In other words, this figure represents the total increase in economic efficiency minus the effects of economic expansion. When we consider that costs of \$10.317 billion (¥1,341 million) transferred to the JNR Settlement Corporation must in fact be born by the Corporation, the actual net effect of the privatization process becomes \$576 million [A2] (¥75 billion). The

improvement in the JRs' profits owing to the change of institutional framework accounts for 90% of the total. Moreover, the effects of cost reduction achieved through the prior restructuring are estimated at \$10.1 billion [E] (¥1,308 billion). When that is taken into consideration, the efficiency gains represented by the privatization process become \$10.6 billion [A2+E] (¥1,376 billion).

Table V-4 Estimate of Economic Efficiency

(US\$ millions)

	FY1987	FY1988	FY1989
Profit increase since restructuring (A)	908	1,113	1,543
Increase due to general economic conditions (A1)	810	716	967
Increase due to privatization process (A2)	98	397	576
Cost reduction due to institutional changes (B)	9,629	10,086	10,317
Cost reduction due to the reduction of liabilities (B1)	8,392	8,787	8,953
Cost reduction due to the reduction of personnel (B2)	1,237	1,299	1,364
(A) + (B) Total amount of profit improvement (C)	10,537	11,199	11,860
(A2) + (B) Amount of profit improvement excluding contributions by economic conditions (D)	9,727	10,483	10,893
Reduction of personnel expenses due to prior restructuring (E)			10,061
(C) + (E) Amount of profit improvement including contributions resulting from prior restructuring (F)			21,921
(A2) + (B) + (E) Of (F) above, the amount of profit improvement excluding contributions by economic conditions (G)			20,954
(A2) + (E) Net amount of profit improvement including contributions resulting from prior restructuring			10,637

- Notes: A : Profits exceeding those projected by the Supervisory committee.
A1: Of "A" above, estimated profits due to general economic conditions (or, the proportion due to an increase rate in transport-volume also experienced by private railways).
A2: Of "A" above, estimated profits due to restructuring for privatization (or, the proportion due to an increase rate transport-volume in excess of that experienced by private railways).
B : Estimated amount of the burden transferred to the JNR Settlement Corporation in order to secure certain profits for JRs.
B1: Of "B" above, estimated burden-transfers due to transfer of liabilities.
B2: Of "B" above, estimated burden-transfers due to transfer of personnel.
E : Estimated cost reductions due to the reduction of personnel during the years 1981-1986.

(1) Calculation of the effects of the macroeconomic environment and privatization process

1. The portion of transport volume increase exceeding the planned figure in the Supervisory Committee's plan is divided into two categories: 1)that arising from the macroeconomic environment and 2)that attributable to the privatization process. (The effect of the privatization process is hypothesized to be the portion of volume increase exceeding that of the private railway companies.)
2. The portion of profit increase exceeding the planned figure in the Supervisory Committee's plan is divided into two categories: 1)that arising from the macroeconomic environment and 2)that attributable to the privatization process. These proportions are the same as those as in No. 1.

		Unit	FY1987	FY1988	FY1989
Factors in transport volume growth	Actual transport volume of the JR's (a)	100 million person-km	2,047	2,176	2,227
	Transport volume estimates by the Supervisory Committee (b)	100 million person-km	1,954	1,952	1,951
	Estimated transport volume of JR's with the growth rate held to that of the private railways (c)	100 million person-km	2,037	2,096	2,124
	Growth rate of transport volume of the private railways	(%)	<2.7>	<2.9>	<1.3>
	Transport volume increase resulting from the macroeconomic environment (c)-(b)	100 million person-km	83	144	173
	Transport volume increase resulting from privatization process (a)-(c)	100 million person-km	10	80	103

(To be continued)

		Unit	FY1987	FY1988	FY1989
Factors in profit increases	Current profits by the JRs (A)	millions of dollars	1,168	1,631	2,068
	Current profit estimated by the Supervisory Committee (B)	millions of dollars	260	518	525
	(A)-(B)	millions of dollars	908	1,113	1,543
	Net profit increase resulting from the macroeconomic environment [profits equivalent to (c)-(b)]	millions of dollars	810	716	967
	Net profit increase resulting from privatization process [profits equivalent to (a)-(c)]	millions of dollars	98	397	576

(2) Calculation of cost reduction due to the change of institutional framework

1. A simulation is carried out which took into consideration hypothetical costs factoring out institutional changes (partial removal of liabilities and personnel) in order to calculate the difference between that amount and Supervisory Committee estimates.
2. An estimate is made of the personnel costs of transferred workers in order to separate the portion of cost cuts resulting from personnel transfers.
3. The difference between the effects of personnel transfers found in No. 2 and total cost reduction found in No. 1 is determined in order to separate the cost reduction resulting from the transfer of liabilities.

(Unit: US\$ millions)	1987FY	1988FY	1989FY
Hypothetical costs found through simulation (A)	36,114	37,328	38,707
Cost estimates by the Supervisory Committee (B)	26,485	27,242	28,390
Cost reduction resulting from the change of institutional framework (A)-(B)=(C)	9,629	10,086	10,317
Effect of personnel transfers (Number of workers transferred: 24,000) (D)	1,237	1,299	1,364
<Hypothetical personnel costs: thousand dollars/person>	<51.5>	<54.1>	<56.8>
Effect of the transfer of liabilities (C)-(D)	8,392	8,787	8,953

- (3) Calculation of personnel cost reduction (at FY1989 values) from prior restructuring

$$\begin{array}{rcl} \text{Personnel reduction in} & & \text{Hypothetical personnel} \\ \text{FY 1981-86 of} & \times & \text{cost in FY 1989 of} & = & \$10.061 \text{ billion} \\ 177,000 \text{ (from} & & \$56,840/\text{person} & & \\ 401,000 \text{ to } 224,000) & & & & \end{array}$$

C2. Causal Links Between Changes and Their Hypothetical Reasons

(Corporatization and Division)

5.39 Corporatization is the fundamental factor behind all of the changes. Its influence owes to the profit incentive that has taken root in the JRs and is something particular to the private corporation. The profit motive was not completely lacking in JNR, but management placed more emphasis on satisfying political demands than on pursuing profits. After the privatization process, the JRs made increases in profits their primary goal.

5.40 Because it created companies of manageable size, the break-up of JNR is closely linked to corporatization and became the necessary condition for a variety of results.

5.41 First of all, corporatization and division contributed to the improvement of the JRs' profitability. Their effects, combined with that of deregulation, amounts to the \$576 million "additional profits resulting from privatization process" shown in Table V-4.

5.42 Corporatization and division also resulted in increases in transport volume and improved service quality because these became means by which the JRs could increase their profits. The quality of service was improved in order to satisfy customer needs and attract more customers. The division of JNR enabled the JRs to manage their operations in response to the needs of the local community.

5.43 As a result of increased profits, the Government's fiscal burden was eliminated. In fact, because the more profitable JRs pay corporate taxes, they positively contribute to government revenue. This is another by-product of corporatization and division.

5.44 The profit motive provided the impetus for business diversification. First, if idle assets and redundant personnel are utilized properly in activities that bring in revenues, they can help push up earnings. Diversifying businesses and increasing investment channels are ways to facilitate the effective use of these resources. Second, through diversification, the earnings gained through the related businesses of railroad operations can be retained internally.

(Change of Institutional Framework)

5.45 First, institutional changes promoted improvements in profitability. As shown in Table V-4, out of the \$11.9 billion estimated profit improvement, \$10.3 billion is attributed to the removal of huge liabilities and excess personnel from the JRs.

5.46 Second, institutional changes contributed to the elimination of the Government's fiscal burden through improved profits and the smooth repayment of liabilities transferred to the JNR Settlement Corporation.

(Deregulation)

5.47 The primary benefit of deregulation is business diversification. There are fewer restrictions on the JRs than there were on JNR, which had numerous legal restrictions placed on the scope of businesses it could conduct.

5.48 A second benefit is that the JRs are able to engage in business activities on their own initiative.

5.49 The third benefit is the improvement in service quality. For example, under the JNR era, JNR could not remodel station facilities to increase customer traffic. Nothing could be done without government approval. Deregulation gave the JRs the autonomy to pursue their own managerial strategies. As a consequence, they were able to implement measures as they saw fit, which acted ultimately to increase business.

(Macroeconomic Environment)

5.50 The increase in transport volume accompanying the expansion of the domestic economy helped to increase the JRs' transport volume and improve profitability, which, as shown in Table V-4, reached \$967 million.

5.51 Domestic economic expansion provided favorable conditions for business diversification. If the economy had been in a slump, the JRs would have had more trouble starting their new businesses, particularly those in which they had little experience.

(Causal Link)

5.52 The causal link between the changes resulting from the privatization process and their hypothetical bases is shown in Table V-5. Only those parts of the equation with especially high correlations are shown. For instance, deregulation and the macroeconomic environment contributed to improved profitability and indirectly contributed to the easing of the Government's financial burden. Because that effect is small when compared to the easing of the fiscal burden brought about by corporatization, division, and change of JNRs institutional framework, no points were assigned to deregulation and the macroeconomic environment in order to bring out the contrast.

5.53 We should note that these "Changes" and "Reasons" have a complex mutual interaction. For example, any increase in transport volume is largely dependent on an increase in the general demand for transportation spurred by economic growth. But if service were still at the level of JNR, which provided customers with few conveniences, increases in the demand for rail transportation might have been absorbed by other means of transportation. Corporatization and division prompted the adoption of a managerial strategy which relied on improving service and raising transport volume to elevate earnings. Deregulation prepared an environment in which this new strategy became possible. It was for this reason that the JRs were able to meet much of the heightened demand for transportation.

Table V-5 Relationships between Changes and Hypothetical Reasons

Changes	Increase in transport volume	Improvement in profitability	Improvement in service quality	Business diversification	Decrease in fiscal burden
Reasons					
Corporatization and Division	○	⊙	⊙	○	⊙
Change of institutional framework		⊙			○
Deregulation	○	○	○	⊙	
Macro economic Environment	⊙	○		○	

D. Issues of Corporatization vs. Privatization

5.54 Although the JRs are still state-owned enterprises at this stage, their performance has substantially improved over that of JNR. This raises the question: Would corporatization alone--without plans to sell shares to private investors--have been sufficient to improve efficiency? The answer becomes clear when we think about whether mere corporatization with no plans for stock sales, existed as an alternative when privatization of JNR was being considered.

5.55 There were five possible choices for JNR reform:

	[DIVISION]	[CORPORATIZATION]	[SALE OF STOCK]
Case 1	YES	YES	YES
Case 2	YES	YES	NO
Case 3	YES	NO	NO
Case 4	NO	YES	YES
Case 5	NO	YES	NO

5.56 The option of no corporatization (case 3) was not adopted. The several reconstruction plans implemented in the JNR years within the framework of the government-owned public corporate system had failed, and JNR's status as a public corporation was believed to have had the following disadvantages:

- (a) As a public corporation, it invited interference from the Government and politicians. Consequently, the locus of managerial responsibility became unclear and the organization was operated without regard to profitability, as evidenced by the construction of unprofitable lines.

- (b) The public corporation structure prevented JNR from making decisions with respect to fares, working conditions, and other matters fundamental to management. And labor and management lacked a sense of responsibility toward the operation of JNR.
- (c) Since the scope of permissible businesses was limited by law, diversification was difficult.

5.57 The options of no division (cases 4 and 5) were also not adopted. The failure of instituting local branch office system attempted in 1957 proved that management based on a partial delegation of powers but without division of a company is ineffective. Another reason why this alternative was never adopted was because it was thought that the following problems occurred as a result of the nationwide, monolithic character of JNR:

- (a) The number of employees and the organizational structure itself were too large, making appropriate management and control impossible.
- (b) It was difficult to carry out management decisions responsive to the local transportation and competitive conditions.
- (c) Massive amounts of internal aid created an irrational interdependence between regions and business divisions. This resulted in barriers to effective management.
- (d) Competition was hampered as a result of the nationwide, monolithic monopoly.

5.58 The option calling for division and corporatization but no stock sales (case 2) was not adopted for the following reasons:

- (a) Ownership of all stock shares by the Government would mean that the Government would have to actively assume managerial responsibility. This was considered a return to the management style that has existed under the old JNR.
- (b) It was considered necessary to sell stock shares and to lighten the fiscal burden.
- (c) It was expected that funds could be raised at advantageous rates by making the JRs' shares available in capital markets.

5.59 For these reasons, the only option available for JNR privatization was that calling for break-up, corporatization, and the sale of stock shares (case 1). Presently, the JRs are simply state-owned companies in a transitional phase of a privatization program based on the planned sale of stock. As indicated in the analysis above, the argument that corporatization alone would effect the benefits of privatization is not persuasive.

E. Meaning of JNR Privatization for Various Sectors

5.60 Privatization brought JNR out of crisis. It also had effects for various sectors outside JNR.

(Consumers)

5.61 The railways' customers are now enjoying the benefits of service quality improvements such as greater convenience and comfort. The JRs have discovered that consumer satisfaction and effective utilization of the JR lines are direct means to increase profits.

5.62 Some users of remote lines have suffered inconvenience as a result of the elimination of unprofitable lines. However, these ill effects have been kept to a minimum by the adoption of supplemental policies aimed at promoting a smooth transition to bus and other forms of transportation.

(Government)

5.63 The Government has enjoyed the benefits of a lighter fiscal burden and revenue income accruing from corporate taxes. Although the JR stock shares have not yet been sold on the stock exchange, the need for the Government to provide financial support has decreased as a result of improvements in managerial efficiency. Once the shares are sold, the Government's fiscal burden will be alleviated even further.

(Local Government)

5.64 JNR eliminated 83 remote lines in the process of restructuring. Local governments could not neglect the inconvenience of local people arising from these eliminations. In cases when railroad services were considered to be necessary for commuters and students, the local governments created joint ventures to run the separated lines, introduced efficient management and modernized equipment. The deficits of these joint ventures have been subsidized for a transitional period of 5 years partly from the local governments. It was a painful but inevitable transition to local governments' responsibility.

(Competitors)

5.65 Transportation companies with competitive lines are vying with one another ever more fiercely and are being forced to further upgrade service. During the JNR years, the transportation companies operating parallel lines in the same districts were not without competition, but the JNR did not actively regard others as competitors. Since restructuring, the JRs have in some cases provided special discounted fares on those lines and have worked to acquire customers from other companies. This competition has had the overall effect of raising the total demand for utilization of those lines.

5.66 The entry of the JRs into new businesses has resulted in competition with companies in related businesses that did not exist before. For example, business activities by the JRs in their station sites poses a threat to neighboring businesses. Yet even this challenge serves to invigorate the overall economy of these areas.

(Employees)

5.67 The working conditions of the JR employees are improving. Because JNR wages were set without regard to business performance, workers' efforts were not fairly reflected in their compensation. However, the JRs wages are increasingly commensurate with the profits gained through the efforts of the workers.

5.68 Those who left the company as a result of JNR's personnel rationalizations faced hardships when changing jobs. But once rationalization occurred, the transition was smooth because measures had been taken to guarantee that such workers would have new

jobs. The public sector employed the transferees within the limits of quotas established for them without increasing total employees. In the private sector, various industries recruited these people principally due to an overall labor shortage in the economy.

(Equipment Suppliers)

5.69 The suppliers of materials and equipment to JNR had an easy time conducting business. JNR brought little cost-consciousness to purchasing and tried to obtain goods with as little effort as possible. Therefore, it continued to buy the same items from the same suppliers year after year and price negotiation rarely took place. To cut costs, the JRs now work to purchase the best goods at the lowest possible prices. Moreover, as part of their new business ventures, some goods they require are produced internally. This implies that former material suppliers are finding fewer opportunities for orders and pressure is being put on prices. On the other hand, this situation offers opportunities to companies that in the past could not sell to JNR.

(General Public)

5.70 The public at large has benefited greatly because the JRs have maintained the transportation service network. The privatization has also helped the nation recover sound public finance. Once the JRs' stock shares are sold on capital markets, the Government's financial burden will be reduced even more substantially. Service upgrades are also providing benefits. In addition, from the perspective of the national economy, overall reduction of transport costs is achieved through the appropriate assignment of labor and the introduction of competitive principles.

5.71 In the end, the biggest winners from the privatization of JNR are the Government, which benefits from a reduction of the fiscal burden, and consumers, who benefit from the improvement in services without fare increases. On the other hand, there have been very few clear losers excepting the old JNR management, the radical union leaders who were ousted from new JRs, and the 1050 employees who were dismissed in April 1990. However, there exist certain sectors which had enjoyed various economic benefits under JNR and have lost them under the JRs. For example, equipment suppliers face more competition now. Passengers in remote lines which have been separated pay higher fares.

F. The Relationship Between Government and JRs

5.72 The sale of JR shares on capital markets has been a part of the privatization program from the start even though it has not yet been executed. Though the timing of the sale depends on the condition of the stock market, the Government has made the decision to carry out its program on a gradual basis beginning in FY1992. The proceeds from these sales will be applied to repaying the long-term liabilities of the JNR Settlement Corporation assumed from JNR. Stock sales will eventually result in a lightening of the Government's burden.

5.73 Under the laws that provided for the establishment of the JRs, many company issues crucial to their management (e.g., appointments of presidents, business plans, and long-term borrowings) still must be approved by the Minister of Transport because JRs remain Government owned. In the future, once the JRs' stock has been completely sold to the public, the companies will likely enjoy the freedom of management enjoyed by the private railway companies. On the other hand, if Government control is prolonged, political intervention might recur and successes achieved since 1987 might be reversed.

VI. SUMMARY AND LESSONS OF JNR PRIVATIZATION

A. Summary

6.1 JNR, a huge public corporation with a 115-year history, was broken up and corporatized in 1987 after a preparatory period of 6 years. It had 414,000 employees in 1980, a long-term debt of \$286.2 billion in 1986, and was virtually bankrupt. While all of the shares of the new JRs' are still owned by the Government, they are to be sold to private investors beginning in 1992. In other words, the JNR privatization process represents a successful case of privatization, carefully planned and executed over a period of more than ten years.

6.2 The performance of JNR since the restructuring for privatization has been remarkable, though it can be explained in part by the general economic growth occurring in Japan during the same period that restructuring was carried out. The annual increase in passengers and cargo since 1987 has been 5% and 10% respectively. The number of employees has been drastically reduced to 191,000. As a result, transportation efficiency has remarkably improved.

6.3 The profitability of the new JRs has been improved due to the reduction of work force and liabilities, and increased transportation volume due to the JRs' deliberate efforts and favorable economic environment. The amount of annual profit improvement for the new JRs as a total was estimated to have reached \$21 billion in 1989 (excluding the contribution of the favorable economic environment), as compared with what the old JNR would have made given the operating structure of 1981, the year the Provisional Committee was organized. Out of this improvement, \$10.6 billion in profits is estimated to be the efficiency gains due to restructuring.

6.4 Before restructuring, the annual subsidy from the government to JNR reached \$4.9 billion on average. After restructuring, the annual subsidy to JRs was drastically reduced. In 1990, for example, the subsidy to JRs was only \$48 million, and \$1.2 billion including the JNR Settlement Corporation. This year, profitable JRs paid \$1.2 billion in corporate tax to the Government. Labor-management relations have also improved. JRs are actively expanding their businesses to areas outside transportation as a result of deregulation, and the corporate image and reputation of the JRs have improved dramatically.

6.5 While the JRs have demonstrated better performance, the biggest beneficiaries of this restructuring are the Government which benefits from the reduction of the fiscal burden, and the passengers which benefit from the improvement in service quality without fare increases. Certain segments of the society such as equipment suppliers and other private railway companies face more competition by the JRs' commercialized behavior. In some cases, passengers in the separated remote lines pay higher fares. However, there have not been clear losers except old JNR management and radical union leaders, and the 1050 employees who were dismissed in April 1990. The privatization process of JNR can be judged to have been a successful one, even though the JRs' shares have not been sold to private investors yet and the JNR Settlement Corporation still has debts outstanding.

6.6 JNR's managerial failure prior to restructuring for privatization can be attributed to a number of causes, classified into three categories below.

- (a) Problems inherent in the public corporation system such as:
 - (i) Control by the Government and intervention by outsiders. In return for JNR's monopoly status as a public corporation providing a key public service, at the same time it was subject to strict governmental and congressional supervision and control. For example, the approval of the Minister of Transport was required in order to build a new line. Furthermore, the JNR budget had to be approved by the Diet. As a result, outsiders, including politicians and the Government, often interfered in its management and forced JNR to invest in unprofitable routes.
 - (ii) Lack of incentive for efficient management. JNR management made little effort to maximize profits by decreasing costs and raising productivity. This behavior can be attributed to 1) a lack of managerial discretion, itself the result of considerable outside interference, and 2) the absence of profit-motivation under the public corporation system.
 - (iii) Slow reaction to intensified competition. Public corporations generally function effectively in a monopolistic environment. However, as a result of a rapid increase in competitive modes of transportation such as automobiles, the Japanese railway industry gradually lost its monopolistic position and JNR market share declined. JNR management could not cope with this situation without having the ability to take appropriate measures, including the swift elimination of unprofitable lines.
 - (iv) Labour unions' lack of sense of crisis. Even after JNR began to run at a deficit, the labor unions lacked the sense of crisis and continued to pursue political issues, refusing to cooperate with management's efforts to rationalize and decrease costs. This attitude resulted in the disruption of work place discipline and a deterioration in the quality of services.
- (b) Size of JNR and insensitive reaction to local needs. This nationwide company was simply too large to be adequately managed by a single corporate entity. Those in the railway business must be sensitive to local demands and provide convenient services for their customers. Under unified, nationwide management JNR was unable to provide locally-based service and consequently lost its competitive position vis-a-vis the private railways in providing local transportation.
- (c) Lack of profit from related businesses. Given its public nature, the railway industry is regulated in determining its fares. Even private railways do not generally expect high profit levels. Indeed, related businesses such as real estate development account for a substantial proportion of the total profit of most companies. As a public corporation with specific objectives, JNR was limited with respect to its scope of business. Thus it could not rely on

related businesses for profits and consequently failed to improve the profitability of the corporation as a whole.

6.7 Characteristics of JNR privatization in the implementation stage are summarized as follows:

- (a) The privatization process of JNR was actually a corporate reorganization of a large loss-making and heavily indebted company that was virtually bankrupt. Corporatization was realized after a gradual and carefully phased program that was carried out over a period of 6 years. Initially, most participants considered the privatization of JNR an exceedingly difficult undertaking due to the seriousness and depth of the JNR crisis, though they conceded that a restructuring of JNR was necessary. In the end, however, the privatization of JNR was agreed upon by a majority of the parties concerned.
- (b) A Supervisory Committee was created in order to consider the issue of JNR privatization, and while this was a governmental committee, political independence made it possible for the committee to formulate independent implementation strategies and programs for privatization. The committee members were also politically neutral experts who were committed to privatization. This guaranteed objectivity in problem solving, and helped make possible the smooth implementation of privatization.
- (c) JNR was a public corporation with a nationally integrated railroad network, but it was decided to break up JNR into six regionally based railroad passenger companies and a seventh firm handling freight for the whole country. The six regional companies were expected to compete with one another and with other private railroad companies. With the introduction of competition, a private sector mentality has grown and management-labor relations, which had radically deteriorated under JNR administration, have improved.
- (d) The profit earning ability of the new JRs was carefully estimated before restructuring. Assets, debts and employees were allocated to each company accordingly. Those companies which could not earn sufficient revenue to cover their operating expenses after this allocation were further supported by the newly created Management Stabilizing Fund.
- (e) By 1985, the number of JNR employees had already been reduced to 280,000. However there were still an estimated 93,000 redundant workers. The Government actively promoted various measures to secure job changes for these workers; the public sector was asked to employ JNR workers to a certain extent, and the private sector voluntarily accepted JNR workers. The change of jobs and the elimination of the redundant work force were carried out smoothly and with few incidents, aided in part by economic growth and by the very low unemployment rate of the latter 1980s.
- (f) The implementation of privatization was divided into two phases. The creation of viable new JRs was the main goal of phase one and was implemented first. Phase two had many problems which required long term solutions, such as the sales of assets and shares, and the repayment of debt. To handle these issues, the shell company JNR was transformed into the JNR Settlement Corporation, which holds part of JNR real estate, a

majority of JNR long term debt, and all of JR's shares. The outstanding debts of the JNR Settlement Corporation, which can not be repaid by the earnings of the Shinkansen Holding Corporation and the sale of real estate and shares, will be borne by the country as a whole. The two phases of privatization were implemented separately, because the first step had to be taken immediately before losing the right timing and environment for privatization.

6.8 With the creation of the JR's, the first phase of the JNR privatization was completed. However, the following issues still remain:

- (a) **Debts of JNR Settlement Corporation.** A major portion, or \$197 billion of JNR's debts were reassigned to the JNR Settlement Corporation along with the real estate and shares of the JR's. These debts are expected to be repaid by the sale of real estate and shares. However, real estate sales have been carried out at a much slower pace than initially planned due to the Government's decision in October, 1987 to prohibit competitive bidding for the real estate of the JNR Settlement Corporation. The Government made this decision at the expense of and against the objective of the JNR Settlement Corporation, because it was thought that such bidding might push up land prices further. Therefore, the sale of real estates has been limited. The sale of JR shares has not been carried out yet, either. As a result, the proceeds from the sale of assets have not covered interest payments. In fact, the debt outstanding had slightly increased to \$201.5 billion by the beginning of the FY1991. Land prices have recently shown signs of decline. Therefore, the Government has lifted its ban and competitive bidding is expected to begin from FY1992. The repayment of debt, the major remaining issue to be solved, must be carried out rapidly through the sale of shares and land, or by other means of maximizing profit through the development of this real estate.
- (b) **Sales of JR's shares.** As soon as the JR's meet the listing requirements of the Tokyo Stock Exchange, their shares are expected to be listed and sold. Three of the JR's (East Japan, Central Japan and West Japan) have already met the requirements and the sales of the shares is planned to begin in FY 1992. However, currently stock market in Japan is depressed and the sales might be temporarily postponed, depending on stock market conditions. For the three island companies, it is crucial to meet the listing standards by strengthening their related businesses such as urban development.
- (c) **Influence of the Government.** Since the Government owns the stocks of the JR's, politicians and government officials still have the ability to exert considerable influence over the companies. For example, the appointment of JR's presidents is subject to approval by the Minister of Transport and is influenced by the Government. When the JR's shares are transferred to the public, the existing laws concerning JR's will be amended and the control of the Government will be minimized commensurate to its influence over the private railway companies, which is basically the approval of fares. However, if the sales of the shares are delayed due to the depressed state of the stock market in Japan, the possibility remains for the intervention of outside factions such as politicians, which has proven detrimental in the past.

B. Lessons of JNR Privatization

6.9 After the restructuring of JNR, the new JRs improved their operation efficiency, the quality of their customer service and completely changed their corporate images. The JRs are now independently profitable businesses and their fiscal drain on the Government has been eliminated. In short, the privatization process of JNR can be judged to have been successful. Success was due partly to the unique economic environment in Japan at the time. The favorable environment included a matured capital market, and a large-scale, high-growth economy that could absorb the redundant work force.

6.10 The following lessons, however, can be distilled from the successful privatization of JNR.

- (a) Any organization carrying out privatization must have thorough knowledge of the SOE to be privatized, have an adequate strategy for the privatization, and a strong desire to see it carried out fully. In the case of the JNR privatization, the Provisional Committee and the Supervisory Committee, both of which were independent from political influence, were able to formulate effective strategies.
- (b) The methods and strategies for privatization must be realistic and must take into account the actual environment of the SOE to be privatized. In the case of JNR privatization, a two-phase method was adopted. During the first phase, efficiency gains and the introduction of competition were the main objectives. These objectives were met by creating seven stock companies each with their own managerial bases of viability. The second phase consists of longer-term issues such as the sale of shares and assets, and the elimination of debt. This two-phase approach was an effective method by which to privatize a huge and virtually bankrupt organization such as JNR.
- (c) The sale of shares to private investors must necessarily be the final goal of privatization. Because improved efficiency was obtained without the sale of the shares of JRs, it could be argued that the sale of shares to private investors is not an absolute necessity for the restructuring of a public corporation. However, in the case of JNR, the successful implementation of the phase one objectives was only possible after those parties involved were assured that the shares would ultimately be sold and that the Government would not assume managerial responsibility. It was this plan which enabled private management to take control. (An adjunct of this was the decline of the socialist-led National Railway Worker's Union, which represented 70% of JNR workers before the restructuring.) Moreover, one of the objectives of converting JNR to stock companies was to repay the outstanding debts of JNR by restructuring JRs into attractive investment opportunities and by selling shares to private investors. The first phase was successful only because it was premised on these objectives. Consequently, the sale of shares was a key element in the privatization of JNR.
- (d) It is necessary to restructure a SOE as large as JNR was into several smaller companies of a size capable of: far increased efficiency, competition among themselves, and the ability to react to local needs.

- (e) For successful privatization to take place, support from the public and especially strong support from the government are imperative. Fiscal reconstruction and administrative reform were the main political agendas in Japan in the 1980s. The restructuring of JNR was realized with the support of the Government, especially with the initiative of the Prime Minister, and strong public support.
- (f) Successful privatization can only be achieved when the correct political and economic conditions exist. In the case of JNR, the Liberal Democratic Party, which was in support of privatization, had a stable majority in the Diet. Thus, the laws necessary for privatization were enacted with few problems. At the implementation stage the economic environment was favorable, making it easier to find jobs for a redundant work force. This favorable timing also provided a boost to the economic performance of the newly created companies.

6.11 These positive lessons above should be balanced with the following two questions:

- (a) The JNR Settlement Corporation has unclear and conflicting goals. For various reasons, the Corporation was not allowed to sell its real estate holdings at the peak of the Tokyo real estate market, and it may be forced to sell some of the stock in the passenger companies at a low point in the Japanese stock market. The issue of maximum asset value realization by the Corporation is, in one sense, merely a decision to have the general taxpayer pay a larger share of the existing debts which others would otherwise be willing to pay. If, on the other hand, the policy of truly privatizing the new companies is subordinated to other, less clearly stated objectives, the door to political interference could be reopened.
- (b) The Shinkansen Holding Corporation was overly complex. This leasing corporation was created in order to let the older and cheaper Shinkansen lines (especially Tokyo to Osaka) cross-subsidize the newer lines where capital costs were much higher, and ridership lower. Since a fresh start was to be made in all areas, it would have been better just to transfer the Shinkansen lines to the new companies at what they were actually worth (with appropriate offsetting debt), rather than try to get the old lines to pay for the new ones. This simpler scheme was only implemented four and half years after the JNR restructuring when Shinkansen facilities were purchased from the Shinkansen Holding Corporation by Honshu companies in October, 1991. However, at this time, the negotiation process to decide purchase prices was a complicated one among the Government and Honshu companies.

C. Suggestions to Other Countries

6.12 It would not be appropriate to generalize Japan's experience of privatization and apply it directly to other countries, because Japan's experience is, in part, attributable to those unique economic and social environment in Japan at the time. However, fundamental lessons of the JNR experience can be highly applicable to other countries, making allowances for the individual circumstances of each country. Developing countries considering the privatization of their "SOE"s should keep the following suggestions in mind.

- (a) Privatization process was carefully planned. The privatization of JNR was not carried out hastily. The planning and deliberations process alone required six years, while the implementation stage, including the selling of JRs' stock, required an additional five years. During this period, the issues for privatization were widely debated, various measures were canvassed, and implementation was ultimately carried out with great care.
- (b) The short and long term problems were separated. Increasing fiscal drain had to be stopped immediately. However, it would have been difficult to solve all of JNR's problems simultaneously: its huge debt, operating losses, large redundant work force, and confrontational labor-management problems. After considerable deliberation, the two phase method was adopted. During the first phase, the establishment of viable JRs' through the division and corporatization of JNR was implemented. During the second phase, longer term issues such as the elimination of debts, the streamlining of the work force, and the sales of shares and surplus real estate were planned for.
- (c) The "impartial" planning and guidance committee was important. Because of the extreme political significance of the exercise, and because all of the conventional approaches had been tried (and failed), a new and non-political approach was needed. The Provisional Committee on Administrative Reform and the Supervisory Committee for JNR Reconstruction took the issue out of politics, and put a number of innovative ideas on the table -- ideas which would never have emerged from JNR management or the union. The essential consensus for action probably could not have been achieved without the use of the Committees.
- (d) The monolithic JNR became a sophisticated mixture of new enterprises. The result of the reorganization was not merely a "slimmed down" railway company, it was a series of new companies, each with its particular market, and each with the assets and labor forces needed to do its job. Where properties from the old JNR were needed by the new companies, they were divided or shared under an innovative series of operating and financial agreements. Breaking up the JNR monolith also meant creating smaller labor unions which are now more focused on serving customers than on national politics.
- (e) The market drove the final form of the restructured companies. Each of the new companies has a clear market to serve. Of the 21 billion annual passengers, only five percent make trips which cross new company boundaries, and the markets served by individual companies are quite different: East Japan carries mostly short haul, urban passengers; Central Japan focuses on longer haul, Shinkansen trips; and the three island companies focus on short haul, regional services. Conversely, unified freight services are provided by a single freight carrier operating over the lines of the passenger companies.
- (f) The new incentives and authorities were better defined. The new companies, even those supported by the stabilization fund, now face the right signals: efficient performance and good service mean higher net income, and there is nothing to be gained from trying to get the Government to pay for inefficiency. Equally important, with the companies focused on

the bottom line, the scope for political interference has been greatly reduced. The companies now have the authority they need to run their operations.

- (g) The sins of the past were left in the past. It was critical that the old debt burden be properly apportioned so as not to sink any of the new companies, and that the planner be conservative as to the ability of the new companies to carry old debt. In truth, many of JNR's financial problems were acknowledged to have been the result of misbegotten government policy or interference. The new companies have been given a fresh start, on a stable financial basis, without trying to make up for past mistakes.
- (h) The attack was on problems and institutions, not people. With very few exceptions, the public's demand for change was directed at the old JNR, and not at individuals. JNR's personnel problem was that the old rules had not put priority on commercial attitudes and marketing skills even though the institution was acknowledged to command superb engineering and operating resources. The transition was handled in a way that did not alienate the existing strong technical base while at the same time bringing in the new skills needed in a market-driven context.
- (i) Every effort was made to identify and compensate the losers. Again with very few exceptions (certain labor union leaders and old line managers), adverse impacts of the change were identified early and fair compensation or transition assistance provided. There were very few points at which anyone could legitimately claim to have been treated unfairly. Given the past history of intense and effective labor union opposition to change proposals, this attention to compensation was a crucial factor in avoiding unnecessary roadblocks.
- (j) People mattered. In the first instance, determined personal leadership of Prime Minister Nakasone was crucial in keeping the process moving. Equally important, the old JNR management were clearly told to get on board, or get out (and many left). The result was a strong and unified effort to keep the process on track. Many institutional reform efforts have failed when active opponents have been left in management positions because of a lack of political will to enforce compliance (or demand departure).

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