

Recent Privatization Schemes in Japan

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INTRODUCTION

Although many factors – such as hypertrophy of the government (financial aggravation), transformation of public goods into private goods, inefficiency of the public sector, and development of the financial market – are working in the background of privatization, privatization should be considered as a basic problem in connection with the system conversion from a mixed economy to a free-market-type economy, as well as changes in the size and functions of government. Actually, in Britain where Thatcher initiated the global trend of privatization, privatization was characterized not by mere ownership conversion, but also by deregulation or liberalization and contracting out, and it was promoted with a series of complementary policies, such as the promotion of a competition policy and the City's big bang. Whether a particular privatization plan was implemented successfully or not depended on the design, scheme, and the economic or industrial situation at the time of the privatization.

We will first survey the trends of privatization activities in Japan in contrast with the latest privatization trends of OECD countries. Second, we will derive some lessons from the results of privatization activities in the 1980s. Finally, we will suggest two basic models of privatization and examine the problems of recent privatizations in Japan, focusing on the Japan Highway Public Organization and Japan Postal Services Corporation.

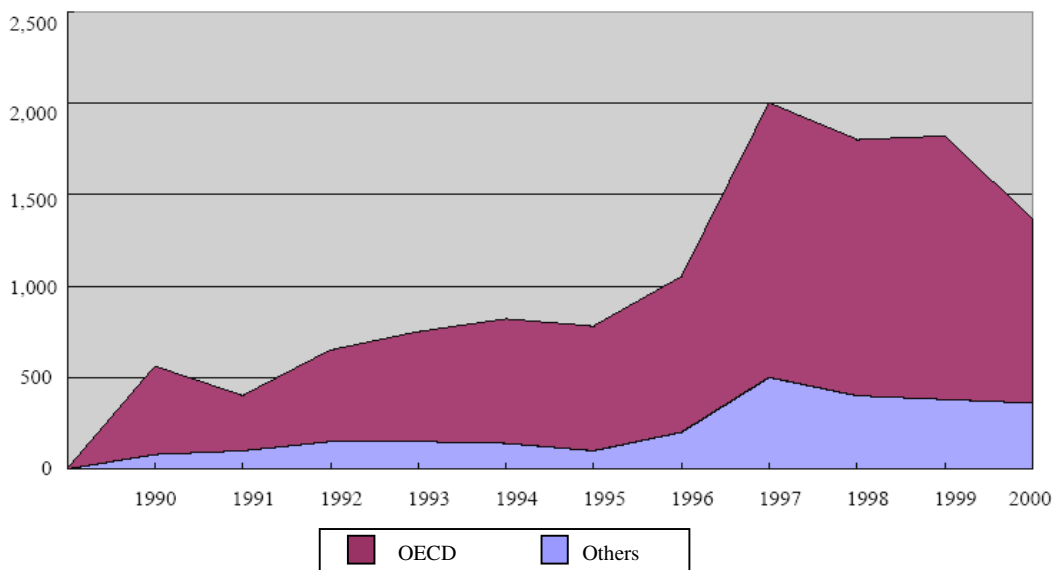
1. RECENT PRIVATIZATION TRENDS

A. Privatization Trends in OECD Countries

According to the latest OECD investigation, the privatization activity in OECD countries showed signs of a further slowdown. After steady growth during the 1990s, and peaking at around USD 100 billion in 1998, privatization proceeds dropped to just over USD 20 billion in 2001, equaling about one-fifth of the peak year. (*Figure 1-1: Two-thirds of the proceeds were collected by Germany, Norway, South Korea, Italy, and Czechoslovakia.*)

Figure 1-1:

Amounts raised from privatization

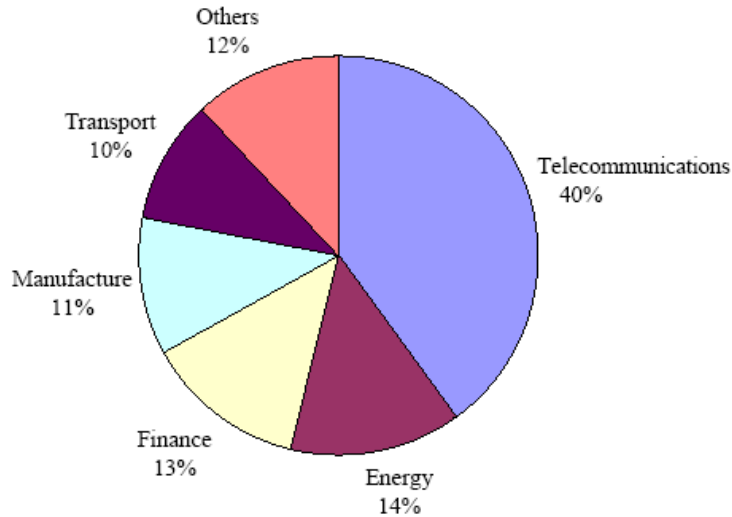


This investigation pinpointed the following three reasons. First, it mentioned the continuation of a downward slide in equity markets that had begun in 2000, and the deterioration of economic performance during 2001. Second, it pointed out the growing “maturation” of the privatization activity in the large OECD countries, implying a diminishing of the inventory of assets for sale. Finally, it indicated the troubles accompanied by privatization and specific failures such as rail track in Britain, Turkish Airlines in Turkey, and the new trend toward re-nationalization in New Zealand, which led to cancellation of the privatization program and/or postponement.

Although the macro-business circle is improving a little now, the privatization activities in OECD countries are not as high as in the 1990s. The fact that large-sized privatizations in the telecommunication and energy fields had been mostly completed in OECD countries (*Figure 1-2*) suggests that privatization activities might be shifting to other fields, such as finance and gas, and moving to the smaller countries.

Figure 1-2 :

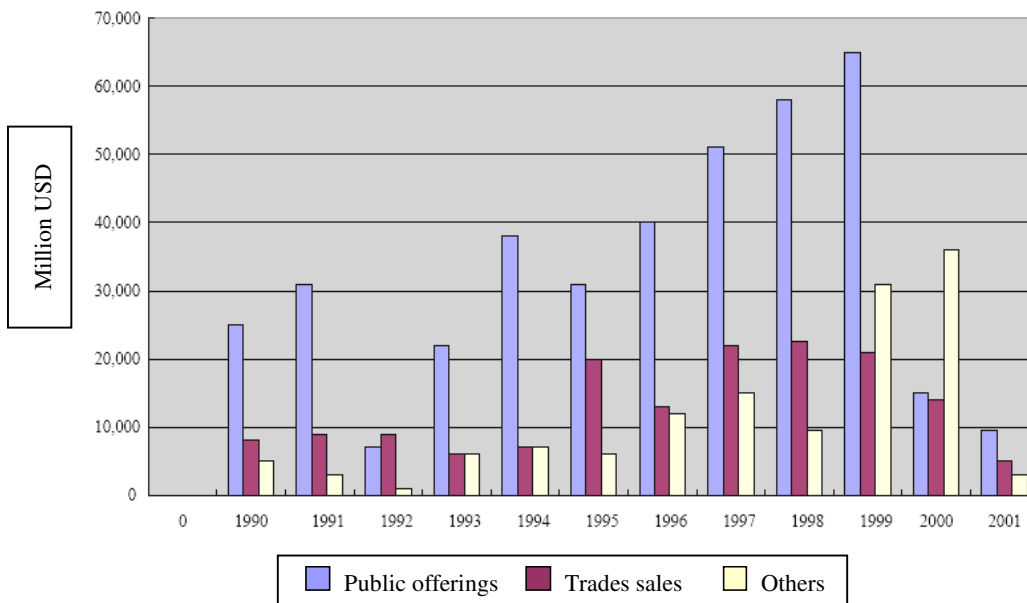
Privatization activity in different sectors in OECD countries (1980 – 2001)



In connection with these movements, the privatization method is changing gradually. Instead of public offerings, which accounted for close to two-thirds of all privatization proceeds, trade sales are increasing (Figure 1-3).

Figure 1-3 :

Privatization in OECD countries by type of transaction



This is due to the higher costs and longer lead times that make public offerings inefficient as a method of sale for smaller assets. Furthermore, the government strategically prefers the sale of controlling stake to buyers who can perform excellent management. In addition, in most privatizations, a portion of the stake is allocated for sale to the employees in order to gain their support. "Maturation" implies that privatization activities should be considered seriously. Privatization programs cover the fields of public goods or public services related to the industrial-social infrastructure or public goods, and such privatization activity would require the government to adopt a more complicated institutional design or scheme. That is, an appropriate regulation system and a device for introducing competition to the concerned industry would be needed to guarantee success. Thus, in making a privatization plan, the government would be asked to be prudent. Coupled with the failures and the problem of golden shares, which are prohibited in principle by the European Court, this trend pares away more vigorous privatization activities.

B. Privatization Trends in Japan

By contrast, privatization trends in Japan are accelerating again in the 2000s. Privatization activities in Japan reached their peak in the 1980s, especially with the privatizations of Nippon Telegraph and Telephone Corporation (NTT), Japan National Railways (JNR), and Japan Tobacco & Salt Corporation (JTSC), and seemed to be calming in the 1990s. (*Table 1-1*: most proceeds of this table are composed of re-sales of government share holdings). However, the government has recently promoted privatization activities and strongly carried out some schemes.

Table 1-1: Country breakdown of amounts raised by privatization

Year \ Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Australia	19	1042	1893	2057	2055	8089	9052	16815	7146	15220	6273	396
Canada	1504	808	1249	755	490	3998	1768	---	11	---	---	---
France	---	---	---	12160	5479	4136	3096	10150	13596	9478	17438	429
Germany	11	351	---	73	678	191	1421	3125	11357	2754	1750	3343
Italy	---	---	759	3039	9077	10131	11230	23945	15138	25594	9729	2653
Japan	---	---	---	---	13875	---	2039	---	6641	15115	---	---
Netherlands	716	179	---	780	3766	3993	1239	842	335	1481	310	831
New Zealand	3895	17	967	630	29	264	1839	---	441	1331	---	---
Turkey	486	244	423	566	412	572	292	466	1020	38	2712	123
United Kingdom	4219	5346	7923	8114	4632	5648	2426	4500	---	---	---	---
United States	---	---	---	---	---	---	---	3650	3100	---	---	---

The background of this movement seems to be the recent improvement of economic performance and revitalization of the capital market so as to digest privatization shares. These economic upturns came at the end of the “lost ten years,” which were due to the dissolution of three excess problems: over-employment, over-productive facilities, and bad loans in the private sector. But the main factor accelerating recent privatization activities is that the government was aware of the necessity of reforming an inefficient public sector in order to cope with financial deterioration in the late 1990s. Thus, although the government pursues various purposes in privatizing public corporations or public utilities – including (1) financial contributions (maximization of proceeds), (2) improvement of the corporate governance of the public sector, (3) improvement of economy efficiency (allocative and/or productive efficiency), (4) innovation and/or improvement of technological and managerial skill, and (5) development of capital markets – the government is obliged to make privatization schemes weighted on the viewpoint of (1) in Japan. That is, after the bad-loan problem in the private sector was settled, inefficiency of the public sector was regarded as the next target to improve from financial troubles.

Though privatization has become a political problem, especially in the field of special public corporations, reform of special corporations had already begun by the second half of the 1990s. The scale and function of the government, which was suffering from financial deterioration, needed severe review. As of 1999, the Japanese government did not look like a big government. In a simple comparison of the total number of state and local civil servants (per 1000 population) and the total amount of salary (as a frame for government expenditure) with those of other major powers, the numerical size of the Japanese government seems small (Figure 1-4, Figure 1-5). However, this aspect of government will be changed completely if we include activities of the special corporations and public benefit non-profit corporations (PBNP, the so-called “*Quango*”).¹

1 There are two kinds and two types of PBNP. One kind of PBNPC is approved by the central government; the other is approved by the local government. One type is the form of social organization (corporate juridical person), while the other is the form of foundation. They have been approved by the authorities' jurisdiction. However, the approval criteria are incoherent and the process of approval and selection are opaque in any authority. These corporations are engaged in the complementary businesses of administration such as supervision, inspection, and public relations. But actually they provide the authorities with *amakudari* posts, and acquire with it a budget (subsidy, commission money) as a reward collateral. Many corporations (one-third or more) have become repositories of former high-ranking officials who are loyal to the authorities that have the power and are responsible for establishment, instruction, and supervision. They also have serious problems in governance. They are allowed to continue in spite of losing sight of the needs of society and being out of date. The preferential measure is also taken in respect to the taxation system (tax exemption of donation in principle and tax deduction of profitable business; as a result, they are imposed only the tax rates of 20 percent of their income). In addition, since disclosure has fallen so far behind, the activities and financial situations were not clear. However, dis-

Figure 1-4 (a):

The number of civil servants
(states)

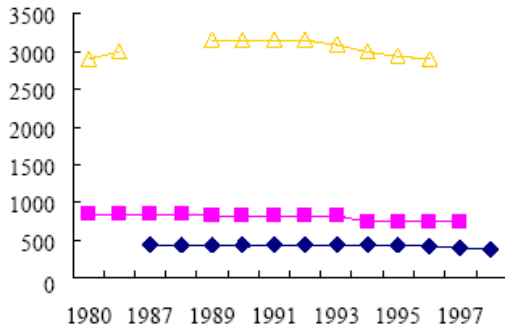


Figure 1-4 (b):

The number of civil servants
(local governments)

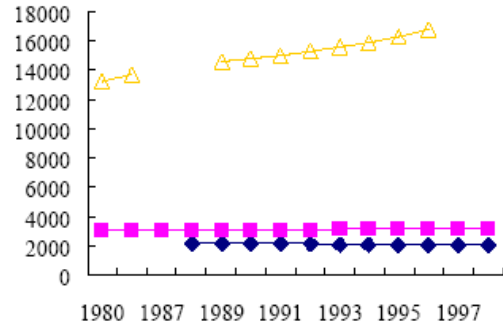


Figure 1-5 (a):

The salary of civil servants
(states)

100 million yen

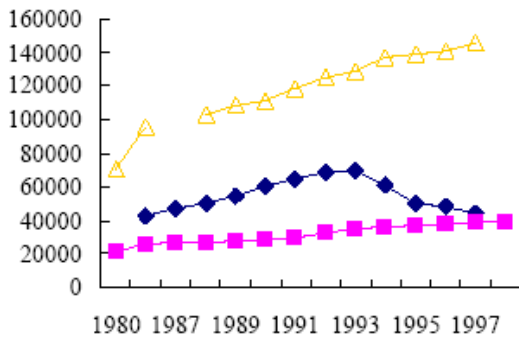
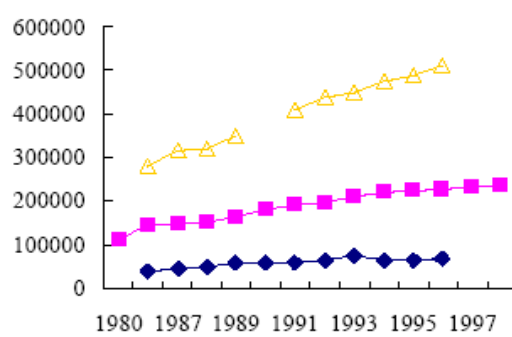


Figure 1-5 (b):

The salary of civil servants
(local governments)

100 million yen



closure in the public sector has been promoted recently, and some of the public corporations were abolished, though the reform is too little, too slow.

A special corporation is defined as “a corporation which should be established directly by law or with a special establishment activity approved by the special law.” Although 92 special corporations in 1995 were integrated and cut down to 74 corporations in 2001, many corporations persisted almost as they were. As of 2001, the special corporations consisted of public corporations (there were none until 2002 with the creation of the Postal Services Corporation), public organizations (11, including the Japan Highway Public Organization), business entities (12, including the National Space Development Agency), financial funds (6, including the Finance Fund for Local Public Enterprise), savings and special banks (3, including the International Cooperation Bank), commercial organizations (1, the Teito Rapid Transit Authority), special companies (10, including NTT), and others (31, including NHK). Moreover, there were about 26,000 PBNPs, which are to be approved if three requirements are satisfied – undertaking the business in connection with public benefit, not aiming at profit, and obtaining permission of the concerned authority – and if they are performing the complementary business of administration. If we add both the personnel (a total of about 1,100,000 people) and the gross expenditure (about 42 trillion yen, with 22 trillion yen for a special public corporation) to the above evaluations as administrative activities, the Japanese government can be said to be neither small nor efficient (*Figure 1-6, Tables 1-2 (a), (b)*).

Figure 1-6: Size

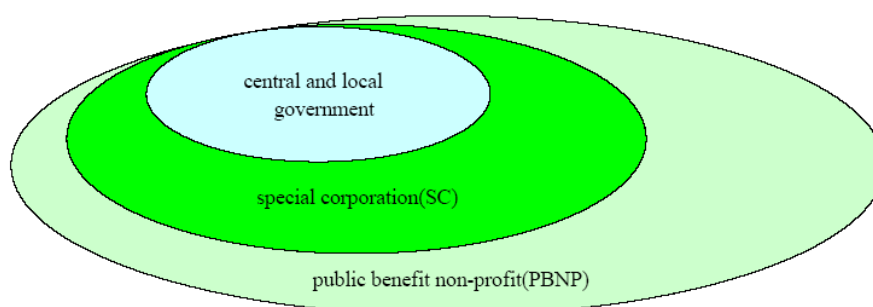


Table 1-2 (a)

	<i>Social Organization</i>	<i>Foundation</i>	<i>total</i>	<i>total (previous year)</i>
<i>controlled by states</i>	3,877 (4,075)	3,266 (3,544)	7,143 (7,619)	7,154 (7,682)
<i>controlled by prefectures</i>	9,147 (9,155)	10,070 (10,212)	19,217 (19,367)	19,284 (19,430)
<i>total</i>	12,889 (13,230)	13,294 (31,756)	26,183 (26,986)	26,264 (27,112)

Table 1-2 (b):

	<i>amount of delivery to PBNP controlled by the states</i>	<i>number of PBNP controlled by the states</i>	<i>amount of delivery to PBNP controlled by prefectures</i>	<i>Number of PBNP controlled by the prefectures</i>
<i>subsidiary</i>	300,096	442	350,482	4,769
<i>amount of commission</i>	146,430	619	536,503	3,148
<i>total</i>	446,526	1,061	886,985	7,917

In this way, the special corporation system was severely questioned about its role and *raison d'être* in relation to the reform of the Fiscal Investment and Loan Plan (FILP) in the second half of the 1990s, when it provided money for the special corporations by compulsorily collecting the postal financial savings (*Figure 1-7*). Although they are engaged in three sorts of business – i.e., carrying out the business relevant to construction and maintenance of industrial or social infrastructure, financial services which play the role of the exit to the private sector, and other non-commercial enforcement which complements primary administration – many of these were no longer businesses that only the government performed well. In other words, the private sector had grown to provide such services characterized as public goods. What on earth then was the requirement for “the extended administration”? Were there no alternatives? And even if not, was there any tool to improve its management? However, the authorities resisted this challenge so strongly that any reform only made use of integration as its method. Thus, reform did not make any substantial progress. Looking at the setback of the special public corporation’s reform, the Koizumi administration aimed at advancing reform by suggesting postal privatization and realizing a “cheap government.” In the big surge from the public to the private, commercialization of public business or services has been promoted in various forms, including private finance initiative (PFI), social investment fund, contracting out and franchise bidding.

Privatization activities have been advanced in the special corporations (which include local public corporations). The privatization of the Teito Rapid Traffic Authority, the Narita Airport Corporation, the Japan Highway Organization, and the Postal Services Corporation has been powerfully promoted under the Koizumi administration. The government also promoted the reform of PBNP by reviewing the inconsistent standards of approval and encouraging the NPO through adopting the registration system. 421 corporations have been arranged (at the state level), and subsidies of 183 PBNC have been broken off under the current policy thesis of “cheap government.”

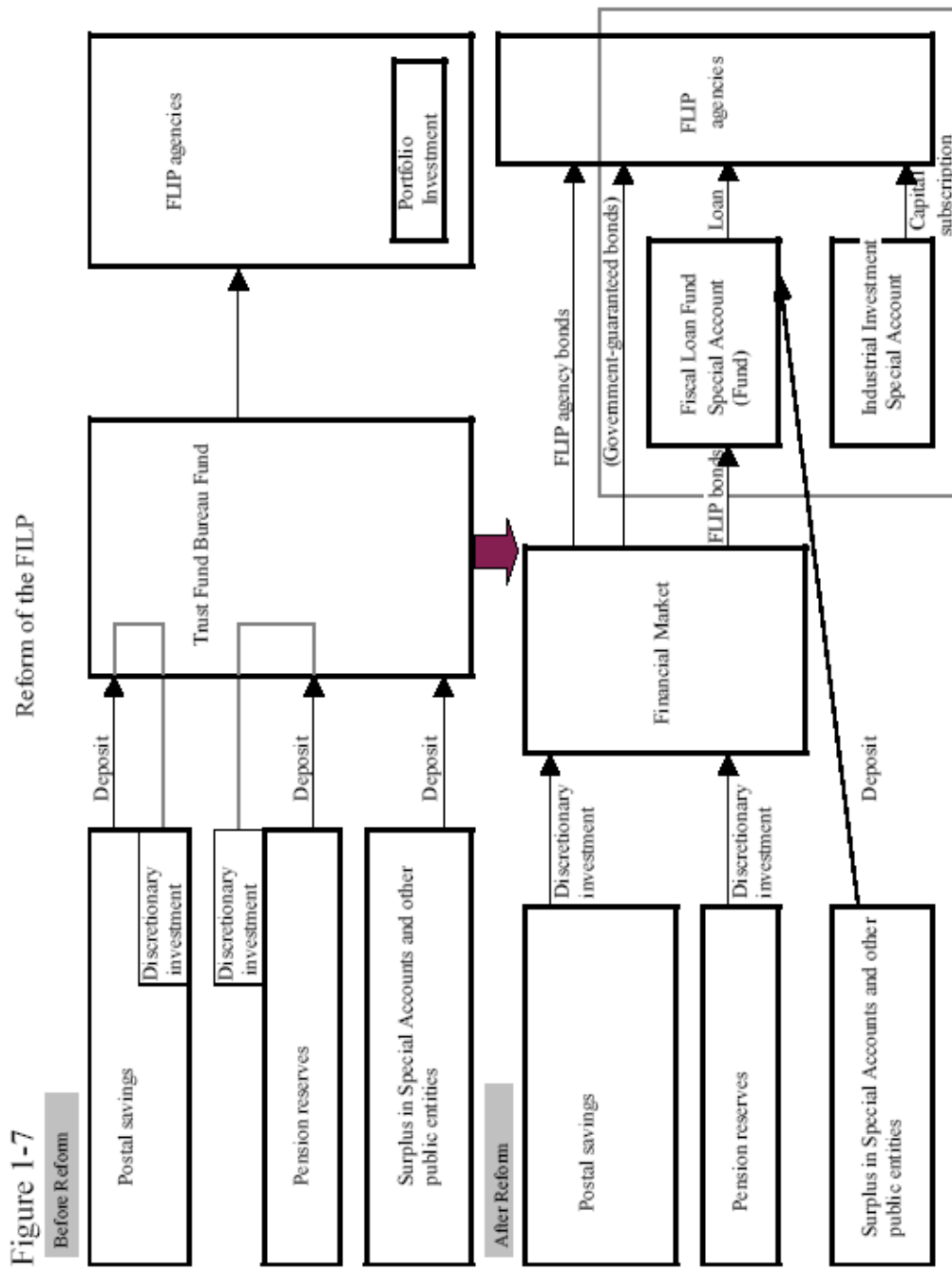


Figure 1-7

2. LESSONS FROM PRIVATIZATION ACTIVITIES IN THE 1980S

A. *Privatization of Three Public Corporations*

The Nippon Telegraph and Telephone Public Corporation was privatized in 1985. The background was the change in the telecommunication market and the rapid innovation of telecommunication technologies. These new waves raised questions about the existing monopolistic system. The introduction of competition required the NTTPC to be privatized to survive, since it had various restrictions in regard to budget, investment, and management under the public corporation system. There was less flexibility of management to compete with new entries. Thus, facing technological innovation, the purposes of NTT's privatization aimed at consumer welfare by diversifying services and improving quality.

The government sold off the NTT shares a few times by public offering, and greatly enlivened the capital market (although the number of individual stockholders was increasing by 1,390,000 in 1986, the NTT shareholders amounted to 680,000). In parallel to privatization, the DDI (after KDDI) and Japan Telecom entered into the long-distance market. Although at that time the structural separation of AT&T had already been determined, the NTTPC was privatized as it was – that is, without any institutional reform – with the idea being that the transitional process in the U.S. should be watched for the time being. Consequently, except for long distance, the monopoly of NTT continued after privatization.

However, NTT Data and NTT Docomo were separated from the main part of NTT in 1982 and 1992 respectively. The structural separation of NTT East, NTT West, and NTT Communication was carried out at last in 1999, and these group companies were integrated under the new NTT holding company. Accompanying this reform, the preferential interconnection system (the so-called MYLINE competition) was adopted for promoting competition in the local phone market, and competition in the fields of mobile phone and broadband services (ADSL, etc.) was intensified. These trends have continued until today. Privatization of the NTTPC has therefore gradually attained the expected effects through two steps of reform: ownership conversion and structural separation.

The Japan Tobacco & Salt Public Corporation (JTSPC) purchased “leaf tobacco” from tobacco farmers monopolistically and protected tobacco farmers by the high customs duty (the so-called “domestic leaf tobacco problem”). However, this became difficult because of foreign pressure to open the market. It was hard for the government to take protection measures, so the government was urged to privatize it. The government judged that the JTSPC could not compete with foreign tobacco companies because of its budgetary and managerial restrictions. As a result, when it was privatized in 1985, establishing managerial autonomy sufficient to bear competition was regarded as a main purpose of JTSPC's privatization. Japan Tobacco's (JT) domestic market share decreased because of the entry of overseas companies after privatization (from 97.6% in 1985

to 72.9% in 2003), but it has promoted diversification in other fields such as medicine, healthy foods, and maintaining management as well. Moreover, it has established many subsidiaries overseas, and recently has acquired foreign tobacco companies.

Unlike the above-mentioned corporations, privatization of the JNR was provoked by domestic and in-house problems. Its management was stuck in the 1980s. The JNR racked up a one-trillion-yen deficit in 1987 in spite of a government subsidy of about 600 billion yen per year. Such inefficient management was caused by superfluous intervention of the government (politicians), delayed response to changes in the market structure of transportation (popularization of private cars, etc.), unified management, and the influence of organization hypertrophy (X-inefficiency). The total accumulated debt – which was composed of deficit lease, deficit accompanied by investment, burden of pension fund, and the Tekken public corporation's debt – had swollen to about 37 trillion yen in 1987. This huge debt, overlapped with the low profit management due to a lack of management capacity and frequent labor disputes, led the JNR to privatization. Thus, the main purposes of the JNR privatization were to improve the low profit management and to dissolve the debt problem. JNR's privatization divided the passenger section into six areas and separated the freight section from the passenger section. Specific district traffic lines (83 unprofitable routes) were arranged at that time.

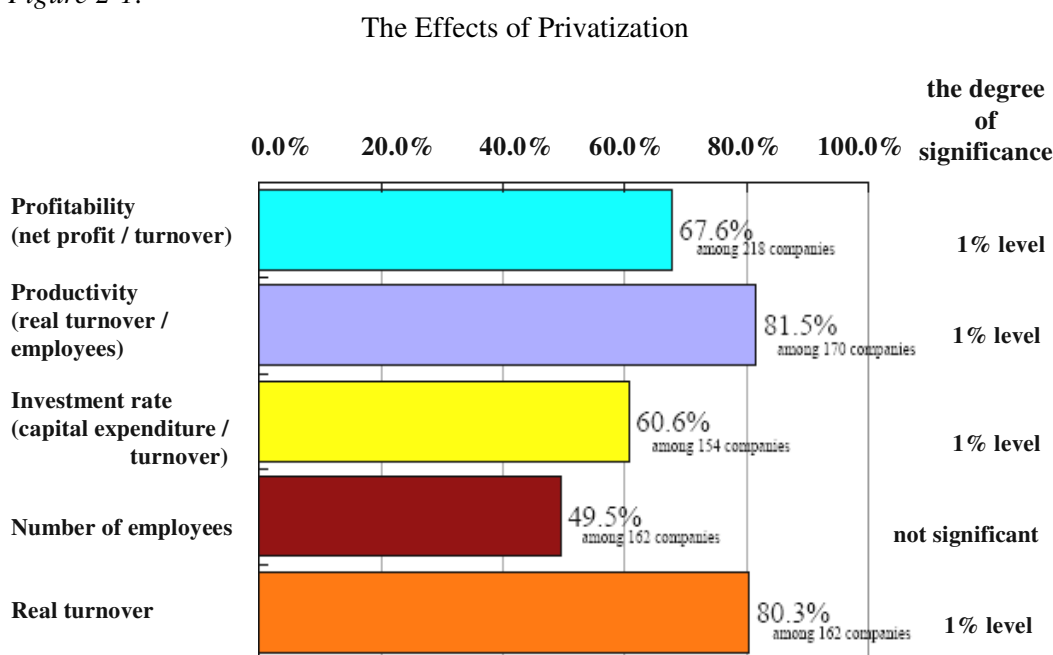
At the same time, the Shinkansen Holding Corporation (SHC) was established to cope with the debts related to the *shinkan-sen*. The SHC held the railroad facilities and lent them to three JR companies in *Honshu*. Although the rental revenue per year reached about 800 billion yen, the JR required a transfer of the *shinkan-sen* facilities after that. The government decided to transfer, receiving the proposal. Then the SHC was dispersed legally in 1998.

The conspicuous feature of this privatization lay in a unique system of the Japan National Railway Settlement Corporation (JNRSC). It was founded to dissolve the debt problem by asset management (refunding the long-term debt by sales of fixed assets and JR's shares), and to deal with the unemployment problem. Although the JNRSC held the property and shares of JNR, at the same time it inherited a debt of about 25,500 billion yen. In spite of its activities, the property could not be sold off effectively. On the contrary, the accumulated debt increased gradually (28,300 billion yen). Consequently, the government assumed most of the debt (about 24 trillion yen) and the Tekken Public Corporation and JR group assumed the remainder. Thus, the JNRSC was dispersed in 1998. On the other hand, this system might have mitigated managerial burdens, and contributed to revitalizing the operation companies indirectly.

B. Economic Effects of Privatization

According to economic research, the effects of privatization on profitability, productivity, and investment are estimated in general as positive (*Figure 2-1*). Even if we admit that privatization has these positive effects on the development of privatized companies and/or the enlargement of the capital market, it is another question whether it has positive effects on consumer benefit, social welfare, or macro-economic performance. Whether these effects are positive or not seems to depend on economic conditions of the concerned industry and country.

Figure 2-1:



Privatization of the three Japanese public corporations also brought an improvement of performance in regard to efficiency and profitability. For example, if we look at ordinary profit per capita, NTT (connection base) has increased productivity by about 8 times and JR and JT have increased productivity by about 3 times and 5.5 times respectively (*Figure 2-2*). In relation to labor productivity, estimated by real turnover divided by the number of employees, the NTT has increased by about 3 times and the JR and the JT have also increased 1.6 times and 2.5 times (*Figure 2-3*). This is due to the reduction of staff accompanied by a series of rationalization or restructuring measures, as well as the increase of the sales level accompanied by supplying new goods and services. Actually, the number of employees of the three companies has decreased consistently since privatization. The number of employees has been reduced by 30 or 40 percent since the time of privatization, and in the case of the JT by more than 40 per cent (*Figure 2-4*).

Figure 2-2:

Change of ordinary profit per capita

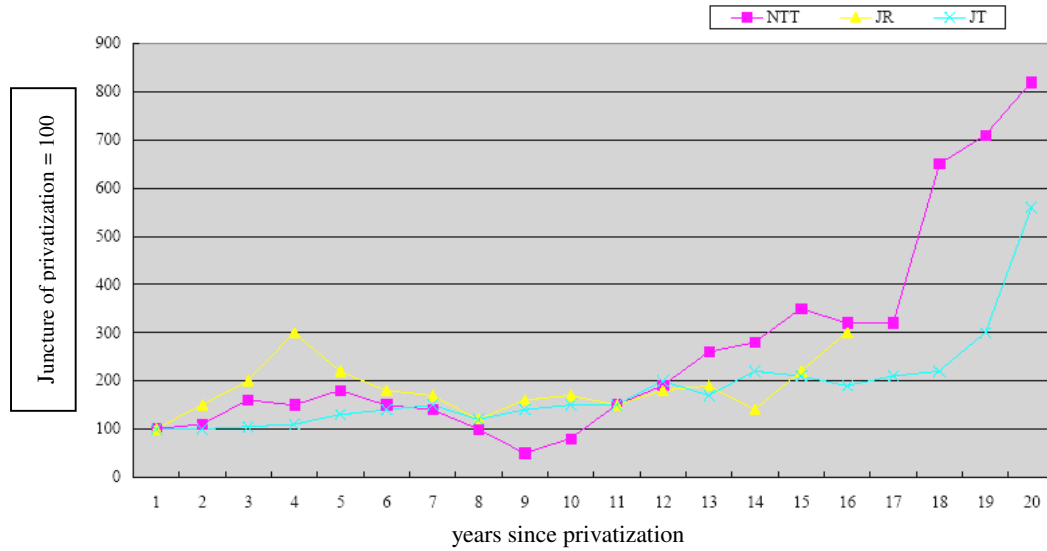


Figure 2-3:

Change of productivity

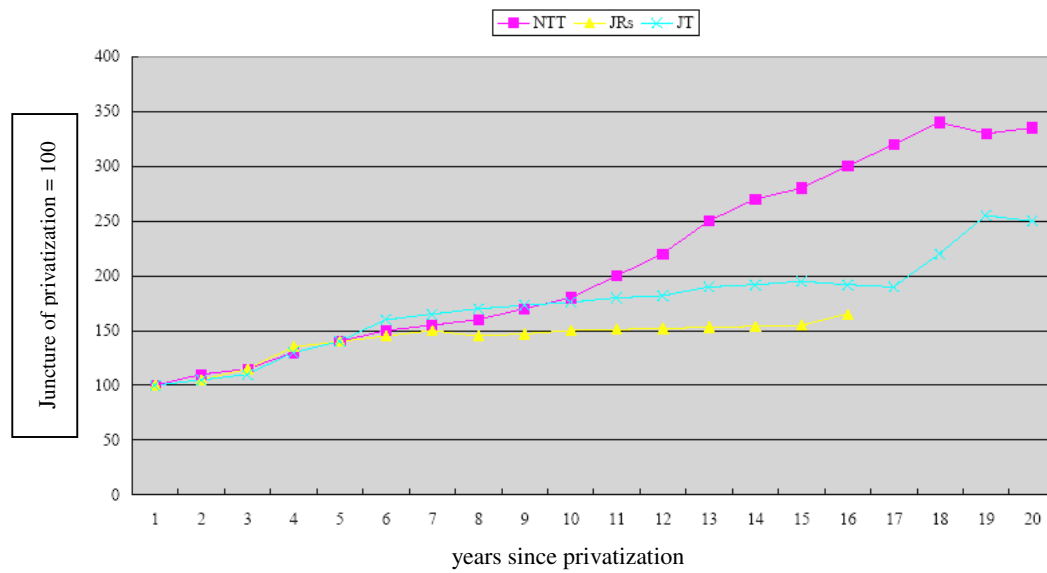
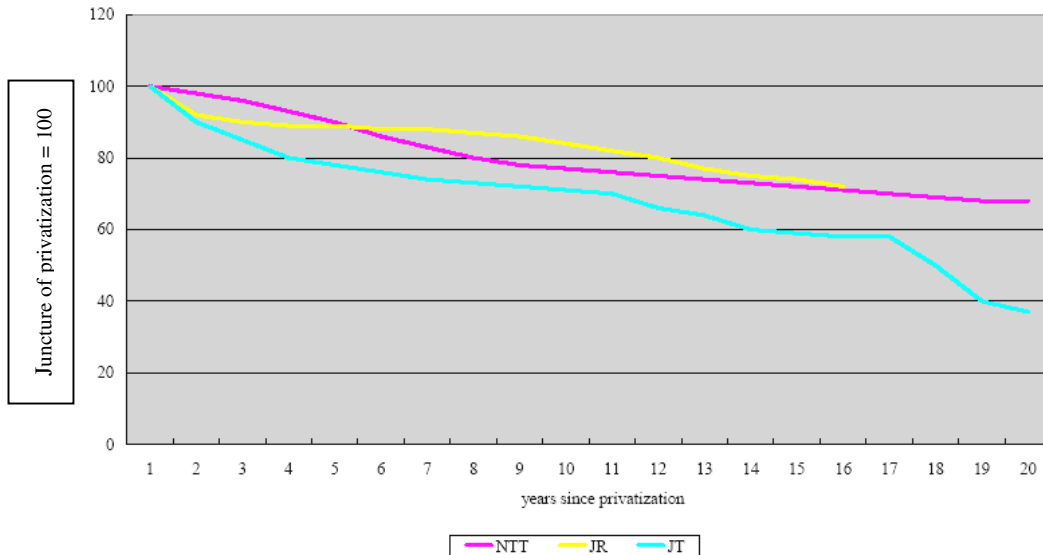


Figure 2-4:

Change in the number of employees



C. Problems of Japanese-Style Privatization

As for NTT, we can mention the following three points. First, regulatory reform required to accomplish privatization was too late to react to the changes in technologies and market circumstances. Measures to promote competition were also insufficient and inconsistent. After the privatization, the Ministry of Post and Telecommunication could not respond promptly to changes in market circumstances and innovation. It took a long time to convert the existing regulations into those compatible with competition. The mobile equipment was converted into a sales system behind the advanced countries. In addition, price cap regulation and a preference interconnection system were introduced around 2000. Recent measures have included the foundation of a universal fund and the introduction of the long-run incremental cost formula for regulating interconnection charges. Abolition of distinctions concerning type I and type II carriers and the introduction of number portability were recently determined.

Second, there is a double legal system concerning telecommunications. One is the Telecommunications Business Law,² and the other is special company law (the NTT Act³). The purposes of the NTT Act cover the duty, scope of business, top personnel

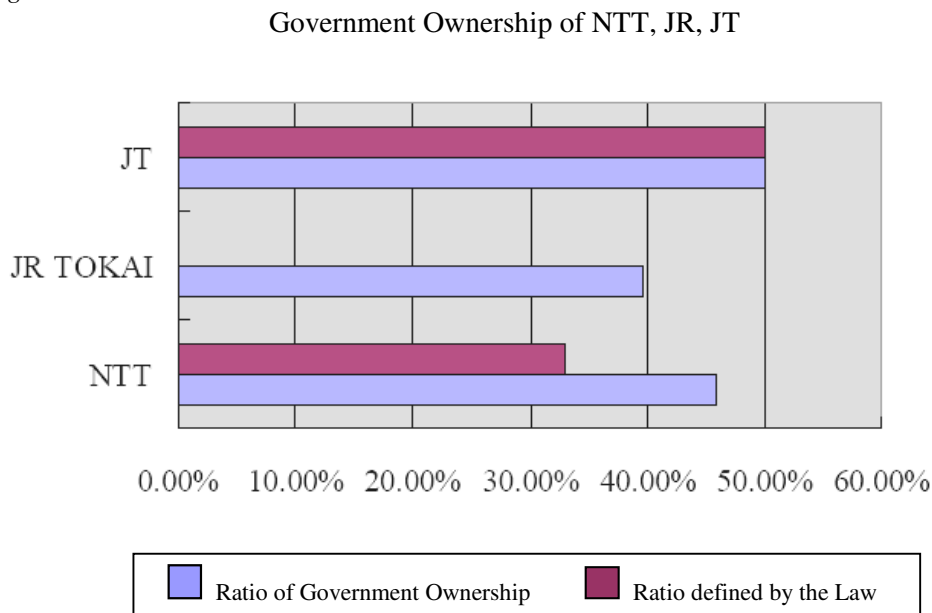
2 *Denki tsûshin jigyô-hô*, Law No. 86/1984.

3 *Nihon denshin denwa kabushiki kaisha-tô ni kan suru hôritsu*, Law No. 85/1984.

affairs, participant restrictions, change of articles of association, merger and dismissal, business plan, supervision, etc. Although the NTT Act was justified at an early stage in order to promote competition by using asymmetric regulation, in the face of the growth of NTT this system should be reviewed in the direction that the business law would integrate the NTT Act. And if possible, a unification would be desirable in order to secure competition neutrality. In this case, the problems of securing universal service and maintaining communications sovereignty might be focused on. However, the former duty should be reviewed under the foundation of a universal service fund, while the latter should be re-examined in the light of the degree of government ownership. This double legal system is common to the JR and the JT. However, since competition is progressing and regulatory reform is becoming an important legal issue in the telecommunications market, it should be argued in this field.

Third, flotation of the NTT shares was not necessarily successful because it roiled the securities market and the share sale scheme was repeatedly interrupted by political judgment. As a result, even now the government holds a vast majority of NTT shares that exceeds the legal rate (33%) (Figure 2-5). Such uncertain government activities have also confused the capital markets and worked to keep individual investors away from the market.

Figure 2-5:



As for JT, we have two problems: one is the lack of a viewpoint on consumer welfare, and the other is the continuation of domestic monopoly. Although introduction of foreign cigarettes has expanded consumers' choice, prices have been rising consistently.

Although cigarettes may be regarded as “bads,” and have been sold at an internationally cheap price, the smoker has not received any benefits from the privatization since it has always been targeted at tax increase. The other is that the monopoly management system has been maintained under the Tobacco Business Law⁴ and the special JT Act.⁵ The manufacturing monopoly, the whole-quantity acquisition contract of leaf tobacco, and government ownership (33%) related to the restriction of new entrants are said to be working as a set of entry barriers.

As for JR, we can point out the following three points: the method of arranging the long-term debt by the JNRSC, the degree of cross-subsidization related to specific district railroads, and the unprofitable management of three island companies. Consequently, the Japanese National Railways Settlement Corporation (JNRSC) has not achieved its purpose, and most debts have been assumed by the general account of the government. This method seems to have worked as a kind of trick to persuade people to receive a tax burden. The second problem relates to the maintenance of the rail network. At the time of the privatization, there were 142 unprofitable deficit district lines (with an annual loss of about 600 billion yen), and 83 of these lines were chosen to be abolished. Although these unprofitable lines had been maintained by successive tariff increases, extreme cross-subsidization was judged to be harmful to efficiency and profitability. However, the JR companies still hold many unprofitable district lines even now. If the same problem actualizes, the policy judgment seems to be very difficult. The third problem is that the three JR island companies are likely to remain as special companies without share sales. The possibility of their flotation is very low, since they have achieved balance through the aid of the management stable fund. The poor performance of these companies does not depend on a lack of management efforts, but on geographical and structural problems of the local transportation market. The options for solving this problem are largely restricted. This may be a sample which shows the limit of privatization accompanied with the horizontal separation.

So far we have individually examined the problems of three privatizations. Next we come to problems common to all privatizations in Japan.

(1) The Necessity for Strategic Thinking

Privatization requires a government strategy before privatization and in the enforcement process. Prior to privatization, a cost-benefit analysis of privatization should be carried out, and even if privatization is judged to be the optimal choice, a series of procedures – i.e., considering the balance sheet, suggesting improvements for management, and selecting advisers for the sale – are indispensable for a successful sale. The government should not over-invest money into advertising, and should not give the applicants easy chances to obtain capital gains through “dressing-up” to avoid the security bubble.

4 *Tabako jigyo-hô*, Law No. 68/1984.

5 *Nihon tabako sangyo kabushiki kaisha-hô*, Law No. 69/1984.

Moreover, the purpose of privatization should be adjusted and simplified as much as possible. This strategic thinking was lacking in the privatization activities in Japan. This applied also to the enforcement stage. The procedure of privatization needs to be minutely elaborated toward flotation from evaluating company assets, determining the amount of selling shares, and sales method. Of course, it is more important to carry out the scheme according to plan in order to avoid market confusion. The government must observe the situation of the capital market and choose the suitable timing.

(2) Promotion of Regulatory Reform and Competition

How to restructure the existing public corporations is a very important question for natural monopolies or the network industry. This decision has an influence upon the industrial organization and the degree of competition, and affects the development of the industry. In this respect, any privatization is evaluated positively as an ideal type which corresponds to the industrial characteristics. However, the government lacks a radical concept of structure separation other than horizontal separation and franchise bidding. Vertical separation and auction have not been thought of in privatizing special corporations.

(3) Privatization and Structure Separation

Although the introduction of competition and regulation reform were indispensable for obtaining the positive economic effects of privatization, the defect of our country lies in the insufficient capacity of ministries to make an appropriate framework to improve regulatory tools and skills. As a result, competition is likely to lose its inherent power ("controlled or managed competition"). Although this is expressed by the delay of incentive regulations and a lack of comparing the existing regulation with regulatory alternatives, at the same time it is also related to the fact that the Fair Trade Commission has not intervened in the behaviors of the network industry. The government did not pursue the coexistence of regulation and competition until the end of the 1990s. The root of such ineptitude lies in a failure to convert the accent of regulation from producer surplus to consumer surplus.

(4) Partial Privatization

In the case of privatizing inefficient corporations, profitability is a concern. Unless future growth of the firm is expected, the firm's value will not increase and flotation becomes desperate due to the difficulty of share-price formation. This happened in the JR's three island companies. This is also the case in recent privatization activities such as the Kansai International Airport, the Narita International Airport, and the Japan Highway Corporation. Ltd. Because the principal-agent relation does not change due to non-ownership conversion, incentives for efficiency do not work well. On the other hand, even if the profitability were secured, and as a result flotation were achieved, the

shares would not necessarily all be sold out to the security markets. The government holds part of the shares in order to secure the chances to regulate or intervene in the privatized company, especially those related to market failures or public interest. This partial privatization is common in most countries. It involves regulation or supervision by the government after privatization. Thus, in making the privatization design of such a public corporation, we should consider partial privatization from the first stage. But government ownership, even if it takes the form of golden shares or a high ratio of shareholding, may obstruct the function of the market and distort incentives for the firms. Careful debate of this problem is necessary.

(5) *Universal Service*

Due to the continued nature of public goods, a part of the services of the privatized company is often regarded as a subject of universal service, and a supply obligation is imposed on the company. But this concept is only a relative one that changes with the development of economic society. Therefore, this nature requires the government to re-examine whether it is necessary to be designated as universal service. But it is problematic what kind of service should be designated. For example, although public transportation services such as rail and bus and (fixed) voice telephone service are unquestionably regarded as universal service, if someone argues that rapid transit rail service and broadband service such as mobile phones should also be equivalent to that, such a view will be criticized. If we recognize the concept of universal service after privatization, there are alternative methods to cope with this problem. The most practical method is to establish a universal service fund by collecting funds from the interests. In this case, a supply obligation is shared among the interests. Another method is to promote deregulation of the privatized company in order to have it maintain universal service by inner cross-subsidy. Both methods have merits and demerits. Therefore, when designing privatization, it is important to investigate which method is better.

3. PRIVATIZATION MODELS AND INSTITUTIONAL DESIGN

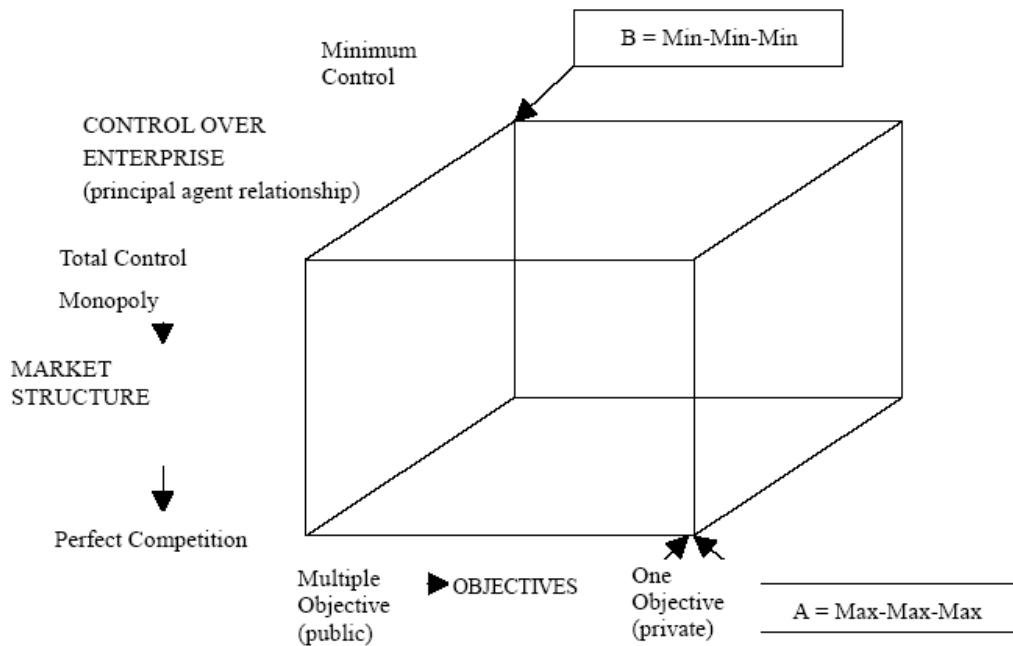
A. *The Cube Model of Privatization*

Hartley & Parker provide a general, theoretical frame of privatization by the following cube model (*Figure 3-1, see opposite page*). According to their model, the economic effects of privatization are influenced by the degree of ownership between the government and the private sector (principal-agent relation), market structure (competitive circumstances), and the change of purposes of the privatized firm. If complete ownership conversion means dissolution of agency problems, acceleration of competition, and simplification of purposes of the firm, complete privatization provides the best effects on the corporate performance or efficiency. Shifting the public corporation to the

private sector may strengthen control of the principal (shareholder) over the agent (management), promote competition, and decrease the number of purposes toward profit maximization. Here, private ownership, a competitive market, and a single purpose are assumed to work as the best incentives to achieve the most excellent corporate performance. As a result, privatization is supposed to be a movement from point B (= min-min-min) to point A (= max-max-max).

Figure 3-1:

Simple cube model of privatization



Here, the assumption that a completely private firm with a single purpose in a perfectly competitive market is most desirable implies that the principal can completely control the agent, and the agent can achieve its purpose in point A. This is because profit maximization means an efficient resource allocation, and at the same time maximization of economic welfare would be achieved there. On the contrary, a completely public corporation is assumed to behave in the monopolistic market, so that profit level, allocative efficiency, and economic welfare would be the lowest in B. This is because a monopolistic market, multiple purposes, and agency problems would distort efficiency and economic welfare extremely in point B. Therefore, the privatization policy is evaluated if it drives for point A in order to achieve constant results wherever a public corporation locates on the cube.

This can be a useful model as the first approach to privatization. Actually, the experimental studies about economic effects prove the correctness of this model to some degree. This model justifies the privatization of manufacturing and the financial sector originally operated in the private field and now distributed into the public field.

However, the efficiency comparison of public corporations and private enterprises is not as simple as this cube indicates. Although they presuppose that agency problems can be dissolved by the conversion of ownership, whether the monitoring system is improved or not is a delicate proposition. Although we can admit that a public corporation holds many purposes accompanied with many layers, agency problems caused by the asymmetric information or insufficient disclosure exist even in the case of the private company. Thus, the effects of the principal-agent relations on economic performance depend on how well the monitoring mechanism works. In principal-agent theory, this problem can be expressed as follows: How does the principal (government, shareholder) give a correct effort incentive to the agent (manager, employee)? Or how does the principal set up an appropriate reward relative to effort level? In this respect, the function of ownership conversion upon efficiency improvement is limited, even if we consider the fact that the private firm operates under the threat of M&A and bankruptcy. Vickers and Yarrow examine this hypothesis by looking for conditions of justifying it, and conclude that ownership conversion works as only one factor of improving corporate performance, and that competitive forces and regulatory policy are more important for it. Their quantitative model indicates that if a monopoly were privatized as it was, and the bad monitoring mechanism in the public sector were not improved, then the economic effects of the conversion of ownership upon a firm's performance would be doubtful.⁶

Thus, this cube model should not be applied to the privatization analysis of public corporations in the field where the government must remain and regulate the privatized firm as a participant or a regulator due to market failures (natural monopoly, externalities, asymmetric information, public goods, etc.). Here, the scheme and design of privatization become very important, since proper policies or measures to (de)regulate the firm or promote competition have a decisive influence upon the results of privatization.

6 If we define a bureaucrat's utility function by the output (public service) and his benefit (difference between actual administrative cost and efficient administrative cost), it is clear that the output amount is over-supplied by the government. To solve the maximization problem of the utility function under budget constraints, the amount of administrative service that exceeds an optimal amount should be reduced. See Vickers and Yarrow.

B. *The Model of Partial Privatization*

In many cases, the privatization of public corporations related to market failure is subject to so-called partial privatization. In these cases, the privatized firm is not permitted to pursue profit maximization, and is compelled to contribute to the public interest.

According to the theory of public interest, the purpose of the government is defined by a maximization of the social welfare function. First of all, the government maximizes the following function:

$$W = S + \alpha \Pi$$

(S: consumer surplus, Π : the producer surplus,
 α : public welfare weight ($0 < \alpha < 1$))

A public corporation, in general, holds a complex principal-agent relation (constituent \rightarrow politician, political party \rightarrow bureaucrat \rightarrow business). Thus, if the monitoring mechanism does not work well, and the internal efficiency is not improved due to the lack of a proper incentive scheme (including compensation scheme), the manager and employees would acquire most of the gain. This problem is reflected on the effort level of the manager and the lump-sum transfer (= subsidy) to the public corporation via the election effect upon the politician. Thus, the above formula is corrected in the following:

$$GW = S + \alpha \Pi - \beta x - \lambda T$$

(x : some measure of the effort applied to cost reduction,
 β : coefficient, λ : shadow price of transfer, T: transfer)

However, this theory assumes perfect information. So, under complex principal-agent relations, if we recognize that the monitoring mechanism does not function well and that information is imperfect, this theory loses its effectiveness as an analytical tool.

Both the concept of social welfare function and the principal-agent theory, however, have succumbed to privatization analysis. For instance, Dieter Bös makes a unique general equilibrium model which consists of one public good and n private goods, and presents a quantitative analysis of partial privatization. He derives the profit-welfare frontier curve, and assumes that the government's representatives aim at maximizing the welfare function under the constraint of an arbitrary profit level (Π^0) on the curve. That is,

$$\begin{aligned} & \text{Max } W(v) \\ & \text{Subject to } pz = \Pi^0 \text{ and } (p_e, z) \in f(\Theta) \\ & \text{(p: price vector, z: netput of the firm, } p_e: \text{ a subset of all prices,} \\ & \text{and } f(\Theta): \text{ production function according to change of ownership ratio} \\ & \text{between government and the private = consumer)} \end{aligned}$$

The profit-welfare frontier can be deduced by yet another optimization approached from the private shareholder's point of view and is the twin to the above formula.

That is,

$$\begin{aligned} & \text{Max } \Pi = pz \\ & \text{Subject to } W(v) = W^0 \text{ and } (p_e, z) \in f(\Theta) \end{aligned}$$

Both approaches are equivalent and can be used as alternative descriptions of the privatized firm's policy. For any degree of privatization, there is a corresponding element in the profit-welfare frontier.

Here, Dieter Bös assumes that the bargaining power of any group of representatives depends on the degree of privatization. Then, since the frontier is compact and connected, there is an interval of the profit level function which contains the bargaining solutions for any given degree of privatization. That is,

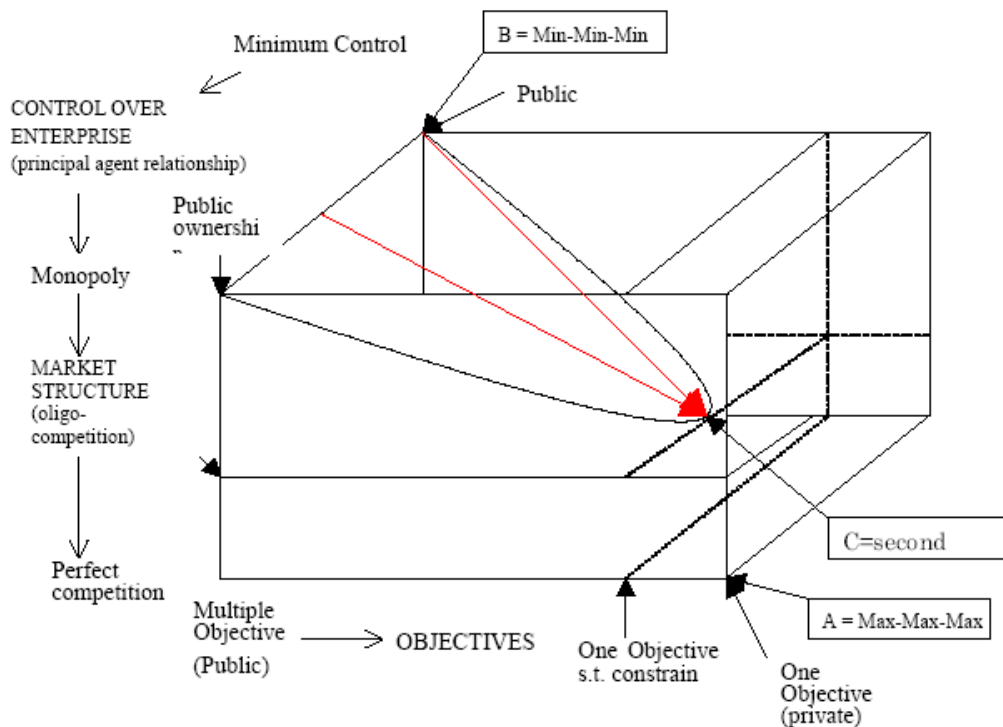
$$\Pi(\Theta) \in [\Pi^{\min}(\Theta), \Pi^{\max}(\Theta)]$$

Π^{\min} is a profit which is attained if welfare is maximized without considering a profit constraint.;

Π^{\max} is obtained, on the other hand, if the firm sets a monopolistic price.

From these approaches, he derives the propositions that profit would rise if privatization increases efficiency, and efficiency is improved as the private shareholders acquire the bargaining powers. In order to understand these relations intuitively, let us quote the above cube model, modifying some assumptions (*Figure 3-2*).

Figure 3-2: Cube model of partial privatization



C. *Risky Aspect of Recent Privatizations in Japan*

a. *Privatization of the Japan Highway Organization*

The Japan Highway Public Organization (JHPO) was privatized in October 2005. When we approach this privatization from the above viewpoint, it is doubtful whether this privatization will be successful. We can point out the following five points:

(1) The main purpose of this privatization is to put the brakes on the construction of toll roads with low or no profitability (70 routes, 2400 kilometers). But a cancellation of the unprofitable roads is impossible because the decision for the construction was placed under the control of the joint counsel (this is called the new direction system, since the counsel can direct the other companies to construct the roads even if the privatized company would deny its proposal). This means that the government is failing to achieve one of the purposes related to the fiscal problem.

(2) There is almost no room to introduce competition. Concerning procurement, it is possible to promote competitive bidding. But it is not likely to be introduced, as shown in the recent large-scale bidding collusion. Competition in the parking areas is expected to progress. However, considering the subsidiary or branch company, it is also not so likely.

(3) The profitability and possibility of flotation are doubtful. This is due to some difficulties in the design of privatization. Originally, the scope for realizing a high profit by rationalization was very small, since the road business is a capital-intensive industry. In addition, the profitable routes are few, with cross-subsidies that cover a lot of unprofitable routes.

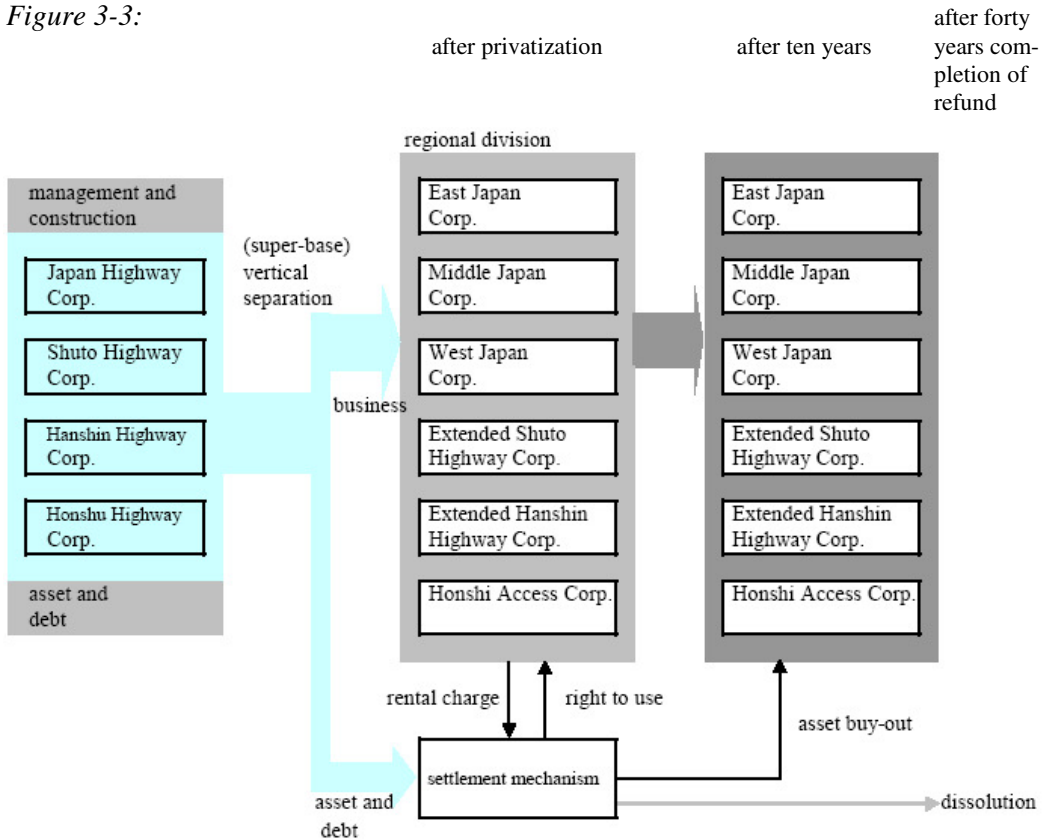
(4) According to the scheme, it will take 45 years to refund the JHPO's long-term debt. When privatized, the JHPO was re-organized so that the institutional design of JR's privatization was imitated. So it was divided into some companies (The Road Property and Debt Control Mechanism) which hold the assets and debts, and six operational companies which provide road services. The former loans the road property and receives rental charges (*Figure 3-3*). With the rental revenue, the former will refund about 40 trillion yen in 45 years. However, no one can guarantee such a long refunding scheme. It is quite uncertain that the long-term debt will be repaid under this scheme. In addition, the latter is re-scheduled to buy back the road property ten years later due to resistance of the Liberal Democratic Party. This means that Japanese-style privatization is different from super-base separation in the EU countries.

(5) There are some managerial difficulties. Many managers other than the CEO have less incentive to exert themselves because they got their positions as a result of *amakudari* from the old JHPO and central government. Furthermore, there are 26 deficit routes among 42 routes. The 10 percent reduction of the charge, which was promised at the time of privatization, would be a big burden to the six companies since there is no

environment in which they can raise the charge in relation to competition with the rapid-transit railway and airlines.

(6) Although a cancellation of the pool system under which the cross-subsidy has been maintained can be evaluated, this may reproduce some low or unprofitable companies like the JR's three island companies.

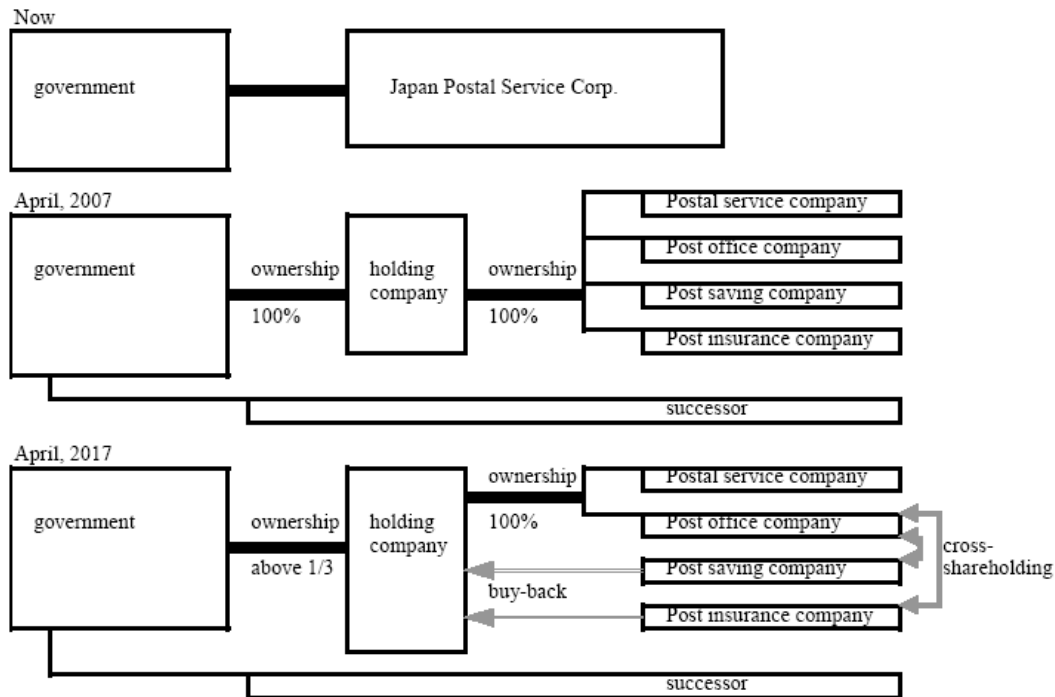
Figure 3-3:



b. Privatization of the Japan Postal Services Corporation

In contrast, the basic concept of privatization of the Postal Services Corporation (JPSC) is clear. The purposes of privatization are defined as a maximization of the public benefit or advantage, a minimization of hidden financial burdens, and a release of postal savings to the private sector. Postal privatization was plotted out from the viewpoint of shutting the entrance of FLIP and determined by the Koizumi administration after much confusion. The JPSC was reorganized according to its function into four companies, and the holding company is going to be established in 2007 (Figure 3-4). But there are some problems.

Figure 3-4:



First, it takes ten years to realize privatization (in 2017). As the transitional period is too long, we cannot expect much impact of privatization. Second, whether the basic policy is consistent or not is ambiguous. For example, although the securing of equal footing between the privatized JPSC and new entrants is a declared goal, this principle does not seem to be realized: in spite of fear from the private banks, no measure to separate or divide its financial parts has been adopted. Although the risk insulation among the privatized companies is declared to be an important principle, the mutual interdependence among the subsidiaries through buying back is admitted under the holding company system. Third, entry barriers such as requirements of the number of posts (100,000), the uniform charge, and the working day (six days) were set up in the postal service sector and competition has been virtually obstructed (Yamato Transport, Ltd. brought this matter to court). Fourth, the social contribution fund of 2 trillion yen is to be founded without arguments on universal service problems. But if we consider the fact that there are only nine villages nationwide that have no private banks, this decision is very conservative.

It cannot be said that these privatization designs are consistent and attractive on the whole. If success is the goal, especially the degree of ownership conversion, the market structure, profitability, and the long-term enforcement period should be re-examined.

CONCLUSION

Recent privatization activities in Japan have their origin in the review of the Fiscal Investment and Loan Program (FILP) that accelerated the fiscal crisis. The ideal way of solving this problem is reckoned to be that the Postal Services Corporation, as an entrance of FILP, should be reformed, along with review of special corporations as an exit of FILP. The Koizumi administration took up this problem again and promoted a series of privatizations as a powerful tool to solve the fiscal crisis. In the background, the government highly evaluated the positive results of privatizations in the 1980s.

Now the government has declared a recovery of the primary financial balance in the near future, and it is engaging in administrative and financial reform. It seems to be extremely difficult to increase indirect taxes ahead of time as a part of fiscal reconstruction without persuading the people, who do not hope for the rise of the national tax burden rate to more than 50%. However, recent privatization activities are not expected to contribute to this fiscal purpose, nor to the improvement of the consumer benefit, because their schemes are too long range to expect any effects on fiscal problems. In addition, they lack the effective device or safeguard to promote competition. Although privatization is a powerful means for limiting the public sector, Japanese-style privatizations will neither contribute to economic performance nor to the achievement of real "small and efficient government" as long as the government continues to intervene in the market and maintain employees as those of special corporations (re-allocation of employees).

In conclusion, it is necessary to re-examine the experience of the privatizations in the 1980s and to learn something from the various failures in order to correct the orbit in a better direction.

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ZUSAMMENFASSUNG

Der Beitrag untersucht Entwicklungen im Bereich der Privatisierung staatlicher Unternehmen in Japan. Zunächst wird ein Vergleich mit der Entwicklung in den OECD-Staaten gezogen. Dort kam es nach jüngsten Studien zu einem Rückgang bei den Privatisierungsaktivitäten, was auf eine Verschlechterung der Wirtschaftslage, eine gewisse „Sättigung“ und auch auf Probleme bei verschiedenen Privatisierungsvorhaben zurückgeführt wird. Demgegenüber kam es in Japan seit dem Jahr 2000 wieder vermehrt zu Privatisierungen, nachdem die Privatisierungsaktivität in den 1980er Jahren einen Höhepunkt erreicht hatte und dann in den 1990er Jahren abgeflaut war.

Im weiteren wird näher auf die Erfahrungen, die man mit Privatisierungen in den 1980er Jahren gewonnen hat, eingegangen. Dabei werden die Privatisierung im Bereich der Telekommunikation (NTT), des Tabakmonopols (JTSPC) und der Staatseisenbahn (JNR) eingehend untersucht. Nach den Gründen und den wirtschaftlichen Auswirkungen werden vor allem die Probleme herausgearbeitet, wie sie bei jedem der drei vorgestellten Vorhaben aufgetreten sind, aber auch vor allem wie sie generell bei Privatisierungen in Japan zu Tage treten.

Ein weiterer Abschnitt stellt verschiedene Modelle der Privatisierung staatlicher Unternehmen vor und geht auf Risiken bei gegenwärtigen Privatisierungsprojekten in Japan ein. Dabei wird die Privatisierung der japanischen Straßenbaugesellschaft und der japanischen Post untersucht.

Das Resümee des Autors ist kritisch: Japanische Privatisierungen steigerten weder die Wirtschaftsleistung, noch trügen sie zur Realisierung einer schlanken und effizienten Verwaltung bei. Es sei notwendig, die Erfahrungen der 1980er Jahre gründlich zu untersuchen und aus den damaligen Fehlern zu lernen.

(Zusammenfassung durch d. Red.)