A COMPARATIVE CASE STUDY ON THE EXPERIENCE OF PRIVATIZATION IN UK, KOREA AND JAPAN AND IMPLICATIONS TO CHINA SOES REFORM

By

Xuan Li

THESIS

Submitted to
KDI School of International Policy & Management
in partial fulfillment of the requirements
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ABSTRACT

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This paper, first, reviews the theoretical framework of privatization with special concern over property rights and competitive nature of the market. It examines economic implication of property rights and suggests different policy implications under different market conditions. Through empirical studies of privatization in United Kingdom (UK), Japan, and Korea, it illustrates the gains from privatization. It also stresses the lessons learnt for future privatization process and policies. In addition, it reviews the recent Chinese reform programs including the ones of the state-owned-enterprises (SOE) and the financial sector. This paper argues that, without proper transfer of property rights, inefficiencies will remain and Chinese SOEs will continue to be a heavy burden on the national economy. Lastly, some policy suggestions for the future reform on the Chinese SOEs will be discussed.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AMCs	Asset Management Companies
GICs	Government Invested Corporations
GOCs	Government Owned Corporations
JNR	Japan National Railways
KDI	Korea Development Institute
KT	Korea Telecom
NPL	Non Performing Loan
NTT	Nippon Telegraph and Telephone
PBC	People's Bank of China
RCC	Regional Credit Cooperatives
RPI	Retail Price Index
SOEs	Stated-Owned-Enterprises
UCC	Urban Credit Cooperatives
WSCBs	Wholly State-owned Commercial Banks
WTO	World Trade Organization
MIC	Ministry of Information and Commutation

INTRODUCTION

During the course of 1980s and 1990s, we have witnessed an incredible growth in the sales of previously state-owned enterprises (SOEs) to private investors. This worldwide phenomenon marked a dramatic reversal in public policy toward the state's role in business. The magnitude of this economic phenomenon is overwhelming. Nearly 100 countries have launched ambitious programs to privatize their state-owned enterprises.

This paper reviews the theoretical framework of privatization with special concern over property rights and competitive nature of the market. It examines economic implication of property rights and suggests different policy implications under different market conditions. Through empirical studies of privatization in UK, Japan, and Korea, the paper illustrates the benefit and gains from privatization. It also stresses the lessons learnt for future privatization process and policies. In addition, it reviews the recent Chinese reform programs including those of the state-owned-enterprises and the financial sector.

Chapter I develops a theoretical framework to explain the following questions: Why are governments privatizing? Does property right affect economic performance? Does privatization guarantee improved economic efficiency? Under what conditions is privatization ineffective in improving efficiency? This framework would allow us to: (1) highlight the impact of privatization on efficiency under perfectly competitive markets; and (2) illustrate the importance of regulation to guarantee improved efficiency, under imperfect markets.

The conclusion of this chapter indicates that the allocation of property rights does, in fact, play a

role in improving efficiency. The allocation of property rights determines the objectives of the "owners" of a firm and systems of monitoring managerial performance. Public and private ownership differs in both respects, as a result, changes in property rights will materially affect the incentive structures, and hence the behavior of management. This result yields some policy implications concerning the relationship between transfer of property rights by privatization and efficiency improvement as well as the state's use of monopoly power. In addition, analysis of the imperfect market conditions also yields important policy implications on monopoly regulation.

Chapter II introduces experiences of privatization in three selected countries, i.e. United Kingdom (UK), Japan and Korea, which are at different stage of privatization process and whose experience could serve as useful references for other countries. Considering the economical relationship and geographical location, privatization process in Japan and Korea's development will provide special insights for their neighboring country, China. In each case, the main characteristics of the country and industries concerned are outlined first before evaluating the policy changes that have been implemented in these countries. The common themes will serve to link the individual case studies with the theoretical perspectives developed throughout this chapter.

In the case of UK, its experience shows that privatization has generally improved consumer welfare via a combination of higher quality and quantity of output and lower prices. UK is considered a pioneer in introducing the price cap regulation to privatize the utility industry. The RPI-X method has been examined to present its advanced application through UK Water's two-stage privatization process.

In the case study of Japan, two privatization cases are highlighted: *Japan National Railways* and *Nippon Telegraph and Telephone Public Corporation*. Increased competition after privatization

brought about price reduction and better services. However, there still remained many unsolved issues, including the heavy debt burden of privatized SOEs and lack of efficiency improvement of NTT after privatization.

Korea has dedicated itself to privatization for more than 20 years. In the early stage, the privatization efforts did not proceed smoothly due to underdeveloped capital market and lack of deregulation. More recently, partly owing to the financial crisis, Korea accelerated privatization process that comprehensively changed the Korea's institutional environment and completed the privatization of Korea *Telecom (KT)*, the first of its kind on privatization. The case of *KT* illustrates that, without proper deregulation, privatization is unlikely to successfully promote increased competition.

Chapter II concludes by drawing privatization experience of the three selected countries to give an overall assessment of the privatization program. It stresses the lessons derived from the case studies, including the implementation of specific policy measures aimed to increase effective competition and to improve the effectiveness of regulatory policies designed to contain monopoly power.

Chapter III analyzes the recent SOEs reforms that have taken place in China since 1998 as China is moving toward a more market-based economy. This chapter illustrates that, despite ambitious new round of reforms, inefficiencies will continue to persist in the SOEs unless the ownership of SOEs is transferred. The suggestions for China's future privatization efforts include: **1)** privatize all the SOEs which have are not policy-oriented, 2) for natural monopolies, maintain regulation to restrict their influence and power in market; 3) implement RPI-X regulation for utility industry privatization; 4) carefully choose a suitable time of business cycles and speed when privatizing SOEs, to minimize the possible side effects such as insolvent debt

burdens and sudden and large scale unemployment; and 5) actively attracting external investors for the newly corporatized SOEs.

One of the other critical issues in China is its financial sector reform. There is an urgent need for the Chinese government to undertake more comprehensive and drastic steps to restructure wholly state-owned commercial banks (WSCBs). These steps should include properly sequenced deregulations on interest rates and on expansion of the scope of business and on entry of new banks. These measures would encourage commercial banks to become more viable and commercial-oriented and, as such, to provide sound financial framework for further SOE reforms.

CHAPTER I

THEORETICAL FRAMEWORK

1.1. Rationales for Privatization

Privatization refers to the sale of SOEs or their assets to private investors. There are many rationales for such privatization programs: promotion of efficiency, gaining political support, increasing profitability, among others. Commonly stated objectives can be generally categorized as follows[1]:

1.1.1. Efficiency

Promotion of efficiency can be divided into two subcategories, i.e. the efficiency of the market or the efficiency of the enterprise itself.

A. Efficiency of the Market

When pursuing privatization, governments usually expect that the privatization programs would achieve the following goals related to efficiency of the market: 1) Encourage new private enterprise formation and expansion of the private sector in general; 2) Promote macroeconomic or sectoral efficiency and competitiveness; 3) Foster economic flexibility and eliminate rigidities; 4) Promote competition, particularly by abolishing monopolies; 5) Establish or

[1] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency,* Edward Elgar Publishing, Inc., 2000: 108

develop efficient capital markets, allowing better capture and mobilization of domestic savings; 6) Improve access to foreign markets for domestic products; 7) Promote domestic investments; and 8) Promote integration of the domestic economy into the world economy.

B. Efficiency of the Enterprise

Efficiency of the enterprise includes: 1) Improve internal management and production efficiency and its domestic and international competitiveness; 2) Introduce new technologies and promote innovation; 3) Upgrade plant and equipment; 4) Increase productivity, including optimal utilization of industrial plant capacity; 5) Improve the quality of the goods and services produced; and 6) Introduce new management methods.

1.1.2. Political Goals

Political goals include: 1) Reduce the government's share in the ownership of market assets; 2) Reduce the size of the government by reallocating the production tasks that can be handled by the private sector; 3) Redefine the role of the government in national economy, by focusing more on its role as a facilitator, and thereby creating an environment more favorable to private economic activities; and 4) Reduce the opportunities for corruption and misuse of public property by government officials and SOE managers.

1.1.3. Budgetary and Fiscal Goals

Budgetary and fiscal goals includes: 1) Maximize net privatization receipts in order to fund government expenditures, reduce taxation, trim the public sector deficit, or pay off public debt; 2) Reduce the financial drain of the SOEs on the state (in the form of subsidies, unpaid taxes, loan arrears, guarantees given, etc.); 3) Mobilize private investments for greater capital mobilization; 4) Generate new sources of tax revenue; and 5) Limit the future risk of demands on

the budget inherent in state ownership of businesses, including the need to provide capital for their expansion or to rescue them when they are in financial trouble.

1.2. Theoretical Analysis of Privatization

Among the goals enumerated above, the most important goal of privatization is to improve efficiency, including efficiency of the market and that of the enterprise. Hence, the first question to be addressed is whether privatization effectively improves economic efficiency in general, through the function of property rights in relation to the market performance. Thereafter, the analysis will be focused on the conditions under which privatization could succeed.

1.2.1. Property Rights and Efficiency

As mentioned earlier, privatization refers to the divestment of ownership of SOEs. Privatization exploits the merits of market solutions that clarify the ownership of the assets. Property rights clearly define the range of individual ownership. Thus, it is possible to determine the function of privatization through the function of property rights. Through the analysis of the relationship between property rights and efficiency, a clearer picture of the impact of privatization on efficiency can be established. When the market is under perfect competition, private ownership will lead to a more efficient and higher productive use of resources than public ownership. Our analysis will first cover the issues under perfect market before addressing the situation of imperfect market later in the next section.

A. Characteristics of Property Rights

The essential characteristics of private property rights are: 1) E**xclusiveness** in the right of use;

and 2) T**ransferability**.[2] It is important to note that these characteristics are polar opposites. Exclusiveness enables an individual to exercise one's private property rights – one can exclude others from using the property without permission. Transferability means that private ownership can be traded**.** This results in allocative efficiency because the one who is willing to pay the highest price will get the property. It is the ability to buy and sell ownership of the rights of private firms that generates continuous pressure for productive efficiency. [3]

Property rights that cannot be traded may generate inefficiency. Such property rights block the individuals who can maximize the value of the resource from getting that asset. What causes the inefficiency of common ownership is not that many individuals own it but that those individuals cannot trade their rights. In other words, those who are part of common ownership are not "real owners" but are rather temporary managers. If property rights cannot be traded, individuals have an incentive to cash in on them during their tenure as owners. They are, therefore, not encouraged to take a long-term view and will tend to push for short-run benefit maximization.

B. Public Property Rights Problem

When a resource is not owned by anyone, it tends to be over-exploited. The oceans and the atmosphere are examples of lack of ownership causing people to treat a valuable resource as if it were a free good. The common property right has similar effects. Such a right is non-exclusive in the sense that no individual who is a member of the relevant social group can be excluded from using the resource in question. These rights, when combined with narrow individual self-interest, lead to economics waste and degradation in the value and quality of the resource.

Common property resources are over-utilized because each individual bears the full gain from

[2] Coase, R.H. *The Problem of Social Cost*, Journal of Law and Economics, 3 I, 1960

[3] Wright, Vincent and Luisa Perrotti, *Privatization and Public Policy*, Edward Elgar Publishing, Inc., 2000:219

his use of the resources but only a fraction of the costs that this use imposes on others. Hardin's "tragedy of commons"[4] illustrates this general phenomenon:

> *The herdsman using the village commons treats it as if it were a free good. Individually each herdsman appropriates the full gain from each additional cow he puts on the commons but bears only a fraction of the costs caused by the resulting overgrazing. It is thus rational for each herdsman to continue adding more cows to the commons and to ignore the costs that this inflicts on others: with all herdsmen acting in this way the ruin of the commons is the destination to which all men rush.*

This result arises because the commons is collectively owned. It is treated as a free, unpriced resource and hence use of the resource is not rationed as it would be if the herdsmen had to pay for grazing their cattle. The herdsmen's behavior is rational in the sense that they are maximizing their private gains and losses from the use of the commons. But because of a defective institutional structure, aggregate wealth is diminished.

The commons problem can be generalized to all resources, which are not owned or collectively owned by a large number of individuals who cannot sell or trade their rights. The fish in the sea are not owned and the only way ownership rights can be asserted is by capturing them. Again, no single fisherman can benefit from conserving the stock of fish. A fisherman who limits today's catch finds that other fishermen have already caught all the fish. The incentive on each fisherman is to catch as many fish as soon as possible. When all behave in this way the economic value of the fishing grounds is dissipated by over fishing, excessive catches and possibly the extinction of the species. In short, generally speaking, competition without private

[4] G.Hardin, The Tragedy of the Commons, Science, I 62, 1968: 1243

property rights is inefficient.

What distinguished public and private enterprises is the fact that public assets are not "owned" since they cannot effectively be transferred. This lack of transferability means that decisions taken by public bureaucrats and employees do not readily translate into changes in the market price of the firm's assets, and the 'owners" have little incentive to monitor public managers' and employees' behavior. In other words, there is agency problem. The agent is not working in the best interest of the principal.

1.2.2. Principal-agent Conflict of Interest

Principal-agent theory is concerned with the problem of information and incentives. When attempting to achieve its goals, the principal is handicapped by lack of certain information, which only the management knows precisely. Efforts of the managers may be unobservable and therefore impossible to monitor. Since the principal cannot directly observe the activities of the management, one cannot directly influence the behavior of the manager. The management has its own objectives; hence it may choose an effort level that is not efficient. [5]

The decisive difference in informational status of the private principal and the public principal lies in the efficiency. The private principal has ex ante knowledge of the actual value. This means that the private principal is able to draw correct information about the actual value form some outside source, not from the agent. The public principal does not know the actual value when signing the contract and the only information about the actual value he can receive comes form the agent.

Private property rights mean participation of self-interested monitors. Self-interested monitors

[5] John Vickers and George Yarrow, *Privatization: An Economic Analysis,* the MIT Press, 1988: 9

reduce the social cost of monitoring. The owners of a private firm are interested in profit. The manager of the private firm knows this goal; there is no uncertainty about weights that should be given to various other objectives. They reduce the social cost of monitoring. Private ownership plus remuneration by variable residual claims creates powerful incentives and a self-enforcing system of monitoring of costs and performance.

If the agent, management, does not act in the best interests of the principal, shareholders, the need to monitor performance and to control public management becomes greater. In the private sector, an important agency relationship exists between shareholders (principals) and directors (agents). At its simplest, the shareholders own the enterprise and appoint directors to manage it on their behalf. The implications of this relationship for efficiency in the private sector are explored below (Table 1). In the public sector, by contrast, the principal-agent relationship is more complex because the ultimate owners of state assets, the principals, are public. Between the public and the managers of the assets (the boards of state industries) exist layers of agencies. The greater complexity of the agency relationship is also illustrated in the table below. The existence of layer of agents provides more room to distort the information flow between principals and resource managers. So privatization can be viewed as changing the nature of the principal-agent relationship to reduce this scope and therefore facilitate the introduction of more effective incentive systems that bind agents to the principals' goals. [6]

[6] Stephen Martinand David Parker, *The Impact of Privatization, Ownership and Corporate Performance in the UK*, TJ International Ltd, 1997:13

Table 1: Flow of Information Between Principal and Agent in Public and Private Sectors

Private ownership	Public ownership
Shareholders ↓ Agent: Directors	Public ↓ Tiers of agents ↓ Elected representatives ↓ Government ministers and "sponsoring" departments
	↓ Boards of nationalized industries

1.2.3. Natural Monopoly and Privatization

The above analysis is based on perfect competition under standard neo-classical theory, but the government should also consider the situation of imperfect competition. This is particularly the case with firms that operate in industries with natural monopoly characteristics. Under such condition, the government should play some role to regulate and control when privatizing the enterprises. Thus, interventions and regulations are necessary.

Under imperfect competition, market mechanism does not always produce the Pareto-optimal results. As mentioned earlier, a particularly troublesome deviation from the perfectly competitive model is the widespread existence of increasing returns to scale, giving rise to the emergence of natural monopolies. The existence of natural monopolies is one of the standard economic arguments used in favor of public enterprises, to capture the benefits of scale economies for the general public rather than for the owners.

Natural monopoly means industries where cost conditions are such that it would be inefficient to have more than one or a very small number of suppliers. It tends to be found where the production technology requires a high fixed cost and a much smaller variable cost so that one

firm can produce the industry's output more cheaply than many smaller firms. The distribution networks (utilities industries) in the electricity, gas, and water industries are example of natural monopolies.

A private monopolist has all property rights but the use of the property can be far from efficient. When there is little competition, the company has the ability to maximize the wealth of their shareholders at the expense of the consumers. This militates against the allocation of the resources to their highest valued users. In the absence of perfect market competition, private property rights have to be supplemented by regulation to ensure that consumers are protected and that the firm does not exercise its market power to exploit consumers and inhibit new competition from arising. Where the production technology precludes competition in the market, the monopolist must be restricted from abusing its market power when it is converted into a private enterprise.

In order to control monopoly power, the government can break up the monopoly firms, encourage other firms to compete with them, and set up regulatory mechanisms.

Typically a regulatory system includes: an operating license for the company, which sets out its public service obligations in detail; a pricing formula to determine maximum prices (and therefore indirectly maximum profits); and a regulatory office headed by a director general. The regulatory office polices the license, regulates market entry and negotiates and monitors and pricing formula and service standards.

Price cap and rate-of-return are the main types of regulations on natural monopolies to improve their efficiency.[7] These two tools are widely applied in utilities industry around the world with

[7] *Price Caps, Rate-of-Return Regulation, and the Cost of Capital Private Sector,* the World Bank, 1996

varying results. They require sophisticated implementation, continual adjustment to new market problems by the government. The details of application of these methods are provided in the next chapter. There are also a number of other regulatory issues on privatization that authorities have to face.

CHAPTER II

PRIVATIZATION IN UK, JAPAN, AND KOREA

2.1. UK Privatization

UK started its privatization programs in 1979. Thus it has a long history of privatization with rich experience and many implications for future privatization efforts in other countries. UK was the first country to start mass privatization, selling more than 90 percent of its total public enterprises. It was very successful in carrying out the privatization programs and also in achieving desired results.

2.1.1. UK Country Survey

A. Initial Conditions

During the Conservative administrations of Margaret Thatcher (1979-1990) and John Major (1990-1997), large-scale privatization of many of public enterprises took place. In 1979, UK public enterprises accounted for 8% of employment, 10% of output and 16% of total gross domestic fixed capital formation. However, they were regarded to be largely inefficient. The productivity growth of SOEs in terms of output per head from 1951 to 1973 was 3% in private manufacturing and 2.7% in public enterprises, while from 1973 to 1985 the figures were 2.3% and 2.1% respectively. In contrast, output per head in 1982 in US railways was 4 times that of the UK, US coal 9 times more efficient, and US electricity and gas 3.5% times higher, with an

average of 2.8 times higher for the whole of manufacturing. [8]

B. Process and Contents

The privatization process in UK was strongly supported by four successive Conservative administrations. The primary characteristic of UK government policy of privatization is the introduction of market incentives into industries where state ownership and legislation had limited private ownership and new entry.

During the first Conservative administration (1979-1983), only companies which were already listed on the stock exchange or which operated in competitive markets were privatized. During the second administration (1983-1987), the privatization of major utilities began with the privatization of *British Telecom* in 1984, followed by the *British Gas*, the world largest public offer for sale. During the third Conservative administration (1987-1992), privatization occurred in water and electricity industries. The fourth Conservative administration (1992-1997) pushed through the privatization of companies previously thought to be not salable: *British Coal*, *British Energy* and the rail industry. For the timetable of UK privatization from 1979 to 1996, refer to Table 2 below.[9]

[8] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 105

[9] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 106-108

Table 2: UK Privatization via Public Offer of Shares, 1979-1996

Number	Industry	Date of offer	%Sold	Number	Industry	Date of offer	%Sold
1	British Petroleum	1979.10.	5.2	**20**	South West Water	1989.12.	97.4
		1983.9.	7.2	**21**	Thames Water	1989.12.	97.4
		1987.11.	36.8	**22**	Welsh Water	1989.12.	98.4
2	British Aerospace	1981.2.	51.6	**23**	Wessex Water	1989.12.	98.4
		1985.5.	59	**24**	Yorkshire Water	1989.12.	97.8
3	Cable&Wireless	1981.1.	49.4	**25**	Eastern Electricity	1990.12.	97.6
		1983 .12	22.3	**26**	East Midlands Electricity	1990.12.	97.5
		1985.12.	31.1	**27**	London Electricity	1990.12.	97.5
4	Britoil	1982 .11.	51	**28**	Manweb	1990.12.	97.5
		1985.8.	49	**29**	Midlands Electricity	1990.12.	97.7
5	Amersham International	1982.2.	100	**30**	Northern Electric	1990.12.	97.5
6	Associated British Port Holdings	1983.2.	51.5	**31**	Norweb	1990.12.	98.4
		1984.4.	48.5	**32**	Seeboard	1990.12.	97.5
7	Enterprise Oil	1984.7.	100	**33**	Soughern Electric	1990.12.	97.5
8	Jaguar	1984.8.	100	**34**	South Wesern Electricity	1990.12.	97.5
9	British Telecommunications	1984.12.	50.2	**35**	Yorkshire Electricity	1990.12.	97.5
		1991.12.	25.9	**36**	Regional Electricity	1990.12.	
		1993.7.	20.7	**37**	National Power	1991.3.	60.9
10	British Gas	1986.12.	96.6			1995.3.	38.3
11	British Airways	1987.2.	97.5	**38**	PowerGen	1991.3.	59.5
12	Rolls-Royce	1987.5.	96.7			1995.3.	36.6
13	BAA	1987.7.	95.6	**39**	National Power-PowerGen	1991.3.	
14	British Steel	1988.12.	100	**40**	National Power-PowerGen	1995.3.	
15	Anglian Water	1989.12.	98.4	**41**	Scottish Hydro-Electric	1991.6.	96.6
16	Northumbrian Water	1989.12.	98.4	**42**	Scottish Power	1991.6.	96.6
17	North West Water	1989.12.	98.4	**43**	Scottish Hydro-Electric/power	1991.6.	
18	Severn Trent	1989.12.	98.4	**44**	Northern Ireland Electricity	1993.6.	96.5
19	Southern Water	1989.12.	98.4	**45**	Railtrack	1996.5.	98
				46	British Energy	1996.7.	87.8

Source: Curwen and Hartley (1997) and Price Waterhouse (1990)

C. The Effect and General Evaluation

It is important to see whether UK privatization and deregulation has actually led to efficiency improvements. According to the multi-firm studies that illustrate labor productivity and total factor productivity measures, two sets of conclusions can be drawn. One set is based on the overall impact of privatization, the other on the relative performance of individual firms.

a. Overall Impact: Privatization does have a positive impact on financial performance rather than on productivity. Privatization itself does not seem to be associated with an acceleration of productivity growth or profitability. It seems that management changes within the public sector prior to privatization did however lead to improvements in performance prior to privatization.

b. Performance of Individual Firms: Some privatizations were clear successes: *British Airways*, *Cable and Wireless*, and *Amersham International*. Reorganization prior to privatization was a clear success in these firms: *British Steel* and *British Coal*. However, privatizations of *Jaguar* and *BAA* seem to have yielded little benefit.

2.1.2. UK utility Industry Survey

A. Monopoly Power

The early privatizations in UK following 1979 exposed few competition problems. The privatization of utilities industry started in the second Conservative administration. The administration had to decide how to regulate a firm with a significant amount of monopoly power and to define the government's role in reducing inefficiency. The two important aims of utility privatization were to introduce competition and to ensure that newly private firms do not abuse their monopoly powers.

The United Kingdom was one of the first countries to privatize utilities, selling off *British Telecom* in 1984, *British Gas* in 1986, the water industry in 1989, and the electricity industry in 1990. The emergence of significant public ownership in gas, electricity, and water can be traced to the need to control prices charged by incumbent firms without allowing excessive duplication of assets which were subject to large economies of scale. The UK also pioneered the use of price control regulation, which was deemed essential to ensure that the monopoly power was not abused when privatizing a public monopoly.

B. Regulation of Privatized Monopolies

Faced with the privatization of *British Telecom* and other utilities the government had a number of choices in 1983. There were two main approaches to prevent monopolistic infrastructure firms from charging excessively high prices: price cap regulation and rate-of-return regulation. The rate-of-return approach was used in Canada, Japan, and the United States. The UK government adopted the Retail Price Index X (RPI-X) method, which proved to be a wise choice later[10].

a. Price Cap or RPI-X Method: Under the RPI-X system of price control, the price charged by a regulated monopoly is permitted to increase from year to year by a specified maximum overall percentage. This percentage increase, RPI-X, consists of the difference between the increase in the retail price index (a measure of inflation) and some factor X. X represents some measure of expected efficiency improvements in the regulated enterprise relative to the rest of the economy. X may be negative or positive. [11]

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[10] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 114

[11] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 182

b. Rate of Return Regulation: This method involves regulating the profits of utilities on the basis of an allowed rate of return on their capital assets. Pure rate of return regulation is essentially a ”cost-plus” method of regulation with disincentives to cut costs. The advantage of this system is that it is easy to administer and enforce and provides transparency. It actually operates via a quasi-judicial process where regulated companies or their customers may apply for changes in prices on the grounds of a change to the rate of return on the companies' assets.

c. Problems With Rate-of-return Regulation: There are inherent problems with imposing the rate-of-return constraint on a firm's behavior. Empirical cases also suggest that it is not desirable method to regulate natural monopolies. The major problem with this method of regulation is the perverse incentives that it gives companies, both to increase their capital assets and not to seek cost reductions.[12]

i. Allowable Costs

First, the firm may have incentive to exaggerate its cost. By claiming that operating costs are greater than they actually are, the firm is in a position to increase its revenue and still remain within the allowed rate of return. Second, the firm can incur costs that are not necessarily in the best interest of consumers.

ii. Incentives for Cost Reduction

There is usually little incentive for a firm to hold down its operating costs if they can pass them onto the consumers. The regulator will not only be a watchdog on waste but also must monitor the firm's effort in seeking least costly solutions. Another undesirable incentive is

[12] *Price Caps, Rate-of-Return Regulation, and the Cost of Capital Private Sector,* the World Bank, 1996

that firms subject to rate-of-return regulation tend to accumulate too much capital for the output being produced. Because the allowed revenue, net of operating costs, depends on the rate base (capital), there is an incentive to increase the level of capital beyond what is needed for economically efficient production.

iii. Rate-base Determination and the Allowed Return

It is not always easy to measure the firm's rate base. The firm's capital stock, or rate base, is instrumental in determining the firm's total profit. The calculation of the rate base is particularly critical for natural monopolies such as electric utilities and local telecommunications companies with very high capital-to-sales ratios. The rate base should be the fair value of the capital. In calculating the fair value, the original cost of the capital, its market value, and its replacement (present) cost should all be considered. However, these three measures individually taken will yield different results.[13]

d. Comparison Between RPI-X Method and Rate-of-return Regulation: Price cap and rate-of-return regulation have different effects on regulated firms as long as price cap reviews are sufficiently infrequent (say, every five years). A price cap subjects businesses to more risks. For example, under price cap regulation, if a firm's costs rise, its profits will fall because it cannot raise its prices to compensate for the cost increases —at least until the next price review, which may be several years away. [14]

Under rate-of-return regulation, however, the business would seek—and, typically, be granted within a year or so—a compensating price rise, so its profits would not change much.

[13] Berg, Sanford V. and John Tschirhart, *Natural Monopoly Regulation, Principles and Practice*, Cambridge University Press, 1988

[14] Johnson, Christopher, *Privatization and Ownership*, Lloyds Bank Annual Review, 1988:89

But if the firm's costs fall, price cap regulation is more advantageous to the firm than rate-of-return regulation, because it would retain more of the resulting benefits as profits. Thus, under rate-of-return regulation, consumers bear some of the risk that firms bear in price cap systems.

This difference in impact means that firms subject to price cap regulation have a stronger incentive to lower their costs because they keep more of the cost savings than they would if they were subject to rate-of-return regulation. But the increased risk they bear tends to raise their cost of capital. (Table 3)[15]

Table 3. Alternative Systems of Economic Regulation

System	Major Characteristics
RPI-X	Average prices limited, in real terms
	No limit on profitability
	Maximum incentives to cost-cutting
Rate-of-return	Ceiling on profit as % of capital employed
	No limit on prices
	Maximum incentives to investment

e. Application of RPI-X Method[16]: In UK, prices are mainly regulated under a RPI-X structure, in which prices are allowed to rise by the rate of inflation (as measured by the RPI) and an efficiency factor "X". The efficiency factor is set for each industry periodically (typically every five years) to reflect the scope for cost savings in the industry. For example,

[15] Johnson, Christopher, *Privatization and Ownership,* Lloyds Bank Annual Review, 1988:79
[16] Johnson, Christopher, *Privatization and Ownership,* Lloyds Bank Annual Review, 1988:80

if the X factor was set at 3 per cent then overall prices in the industry would be permitted to rise by the RPI-3 per cent each year until next price review. [17]

The price control applies to prices of monopolized services and not to service where sufficient competition has emerged. The proper choice of an X factor is critical for the long-term viability of any price cap regulation plan. [18] If too small an X factor is imposed, the regulated firm will earn excessive profit and thereby jeopardize political support for the regulatory regime. If too large an X factor is imposed, the financial integrity of the regulated firm can be threatened. Therefore, the essence of price cap regulation is to select an X factor that poses a significant challenge to the regulated firm, and that promises gains for consumers relative to alternative regulatory regimes.

X will depend on the industry being regulated.[19] The setting of X for an industry depends on estimates of what operating and investment costs might be required for a particular monopoly firm. Estimates of these can be obtained from analysis of the costs incurred by similar firms. Comparisons of efficiency are particularly important in setting initial prices at the start of the regulatory review period.

In the case of *BT*, X took a very high value of around 3 percent; *British Gas* and *British Airports* were permitted an X of 2 and 1 percent respectively. [20] In water, the rule is RPI + K, where K represents both expected productivity gains and a permitted annual increase in the

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[17] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000

[18] Bernstein, Jeffrey I. and David E. M. Sappington, How to Determine the X in RPI - X Regulation: A User's Guide, 2000

[19] Johnson, Christopher, *Privatization and Ownership*, Lloyds Bank Annual Review, 1988:80

[20] Johnson, Christopher, *Privatization and Ownership*, Lloyds Bank Annual Review, 1988:80

real price of water to allow for quality improvements (think of it as RPI – X + Q, where Q stands for the quality improvement).

i. Basic Guideline

The X factor should reflect the extent to which the regulated industry has historically achieved higher productivity growth and faced lower input price inflation than other industries in the economy. This guideline is appropriate during the specified period of price cap regulation when the following four conditions hold: (1) All of the regulated firm's services are subject to price cap regulation; (2) No major structural changes (such as a strengthening of competitive forces) are anticipated in the regulated industry; (3) The rate of price inflation outside of the regulated sector is not affected by the pricing decisions of the regulated firm; and (4) The economy outside of the regulated sector is competitive.

ii. Time Spacing of Price Reviews

The longer the period between price reviews, the bigger the incentive. However, the price reviews must not be too frequent otherwise shareholders could achieve little in the way of profit gains thus diminishing efficiency incentives. If the X factor were immediately adjusted when costs are reduced by a large amount, then, in effect, the price cap would become a rate of return or cost of service regulation; and the incentive to reduce costs by more than X would be removed.

iii. Need for Balance

As the regulator, the government needs to ensure balance between ensuring a profitable environment for new entrants and promoting more competition. It needs to know the marginal costs (cost function) and demand function of the regulated enterprise to set prices

optimally. The regulator is responsible for managing the level of competition in the industry. The regulators in the past have favored more competition but have been aware of the need to make market entry attractive to newcomers. Too high an access charge would deter competition, while too low a charge would lead to an excessive expansion of the industry.

2.1.3. Case Study: UK Water Industry

In the simplest form, price increases are just capped by the formula RPI-X. However, price capping formula can be much more complicated. From the study on evolution of price cap regulation of UK water industry, especially after the review of the first period of the privatization, we may have clearer understanding on how to apply the price cap regulation to improve the competition.

A. First Stage

From 1973 to 1989, there were ten vertically integrated water authorities in the UK, each responsible for providing water, sewerage, and drainage services in England and in Wales. The assets of these water authorities were transferred to 10 subsidiary companies, which were sold to the private sector in 1989 as part of the Conservative government's wide ranging privatization program. At the time of privatization, the government and the water supply purchasers recognized that substantial investment was required in the industry to raise drinking water quality and environmental quality to European Union Standard. A condition of the sales was that the water supply companies should improve quality.

a. Contents: In September 1989, the assets and liabilities of the then water authorities were transferred to ten subsidiary companies within holding companies (known as *Water Groups*). Shares in the holding companies were sold in November 1989. Each subsidiary company was granted a 25-year operating license, making them responsible for all water and

wastewater services, including extracting raw water, delivering processed water, and receiving, treating, and discharging wastewater. The Secretary of State for the Environment of Wales (depending on where the appointee operates) can terminate these operating licenses at anytime, provided it gives 10 years notice.

b. Regulation: The Government introduced price-cap regulation in 1990. This was in response to concern that the utilities would abuse their monopoly power. In 1989, companies were asked to provide estimates of their future costs with reference to an asset management plan. These costs were scrutinized by consulting engineers and then reduced on the basis of the potential for efficiency saving. This information formed the basis of the first price cap formula which was:

Price cap 1990 to 1995 = RPI + K

RPI represented the retail price index. K represented the incremental cost of quality improvements minus the efficiency element.

To prevent service providers from exercising monopoly power by lowering quality instead of prices, the price capping formula contains a quality factor. The government also held monopoly power in check during the first years of privatization by holding special (or "golden") shares in the ten water and sewerage holding companies. These special shares were redeemed on 31 December 1994 to expose water and sewerage companies to competitive disciplines through threat of merger and takeover.

c. Outcome: OFWAT, the UK's water supply regulator, believed that the water companies were able to exert undue influence over government in the setting of these initial pricing limits. The result of these limits was that water charges increased by about five percent per annum or 25 percent in real terms. There was considerable customer unrest as

the first periodic review of the price formula approached. Water affordability was becoming an issue for a number of low-income customers. The water companies' return on investments was around 13 percent. As part of the review process, OFWAT later determined that the average cost of capital was five to six percent.

B. Recent Stage and the Evolution of Price Cap Regulation

a. Measuring Price Cap: A more precise cost and output matrix was defined as part of the first periodic review and companies were requested to put forward an asset management plan for the second pricing period. OFWAT, on inspection of these plans, found them to be gold plated, being little more than overbids for resources to carry out dubious improvements. A process of cutting these bids and their costs down to size commenced. It is reported that the debate between the regulator and the companies about the cost of capital was intense and at times heated. The review outcome was that the escalator K in the previous price cap was reduced from five percent per annum to one percent. The K escalator was also broken down into its components of quality and efficiency as follows:

Price cap 1995 to 2000 =RPI +Q - X where:

+ Q is the incremental upward cost pressure of quality improvements and

- X is the forward looking efficiency improvement.

Consumer dissatisfaction continued after the 1995 periodic review. Customers and the opposition party were dissatisfied that the water companies management were receiving large remuneration packages while water companies were earning large profits. With a change in Government in 1997 a special one-off tax was imposed on water companies. This tax was intended to redress the "bad deal" the new labor government considered its predecessor had

struck on water utility privatization.

Preparation for the second periodic review of the price cap in the Year 2000 was undertaken using a new price cap methodology as follows:

Price cap 2000 to 2005 = RPI - P - X + Q ± V ± S where:

P is an initial reduction in prices for high performance (profitability) in the previous period;

X is the forward looking efficiency improvement during the period;

Q is the incremental upward cost pressure of quality improvements;

V is to balance supply and demand pressures;

S is a service factor reflecting enhancements or controlled reductions in standards.

b. Difference from Previous Stage Regulation: Unlike previous periodic reviews, companies will not be required to produce asset management plans detailing costs. This plan is to be produced after the review has concluded and the price cap variable has been determined. The plan is intended to become a monitoring document during the period 2000 - 2005.

OFWAT's director has indicated that he expects water prices, after the review and the introduction of the new formula, to be cut and then remain generally stable for the next four years — this means that X should be equal or greater than Q+V+S. Source: OFWAT (1998).

c. Implications: The UK's experience with price cap regulation highlights that substantial care is required in developing price caps in the water supply industry. This experience demonstrates the pitfalls that can be associated with this form of regulation, which could help other regulators to introduce effective and well-designed price cap

arrangements.

When price caps are reviewed, it is common for the regulator to examine profitability and rates of return. For this reason, it has also been argued that, as price capping mechanisms evolve, they become profit-limiting mechanisms and can converge into rate of return regulation. This can occur where the regulator increases the value of X or some other variable in response to observed high profits earned in the period prior to the review. In this environment, firms may come to learn that increased efficiency will be offset by a higher X in the next period and they may alter their behavior accordingly. Thus, over the longer run, care must be taken to ensure that the utility does not have an incentive to gold plate investments or inflate costs.

King (1998) points out that if this form of monopoly regulation is applied carefully it can offer substantial benefits to all parties concerned. However, if price cap regulation is poorly designed or subject to arbitrary re-evaluation it may be worse than more traditional forms of monopoly regulation. He argues that, to be effective, the regulator of price caps should:

- Carefully consider the bundle of goods and services to be covered by the cap to avoid anti-competitive abuse but to permit flexibility.

- Design the review process so that information used in periodic price cap reviews is outside of the control of the regulated firm and is not based on past performance to avoid the cap degenerating into rate of return regulation. The use of industry performance data rather than firm level data could assist here.

- Maintain credibility of the system by not arbitrarily revising X factors midterm on the basis of current profit information.

2.2. Japan Privatization

2.2.1. Japan Country Survey

A. Initial Conditions

By the late half of 1970s, Japan had reached a crisis situation. The financial structure was inflexible and could not adapt to the necessity of reducing expenditures. In 1975, the government began issuing special bonds (deficit bonds) to help cover administrative expenditures. By 1979, bonds had been issued for a total of US$438.5 billion 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 OECD countries, whose dependence ratios in 1979 ranged from 5.6% (USA) to 14.2% (Germany). 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. [21]

A. Initiation

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---Japan National Railways (JNR), Japan Monopoly Corporation (tobacco and salt), and Nippon Telegraph and Telephone Public Corporation. The Committee also instituted requirements for the review of all projects requiring administrative approval and government funding, and mandated private sector participation

[21] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000

in all large urban development projects.[22]

B. Features

Fundamental changes in privatization took place in the middle of the 1980s. Four big SOEs, i.e. NTTPC, Japan Monopoly Co., Japan Airlines, and JNR, were privatized Some features can be drawn from these processes.[23]

a. Japan's privatization of public utilities such as NTTPC and JNR is incomplete. The government still has controlling power in terms of shareholding, appointment of directors, price setting, and business activities.

b. Privatization and deregulation processes are also at the halfway stage. The processes with regard to public utilities recognized as natural monopolies such as electricity, gas, water, and the post office have been delayed or even left untouched. The number of approvals and permissions to be issued by Government agencies has not decreased.

c. The sales of SOEs directly helped government revenues. The government received US$78.6 billion from NTT, US$4.5 billion from Japan Tobacco Inc., US$8.6 billion from JR-East Japan, and US$3.8 billion from JR-West Japan sales. Corporate tax revenues also increased as privatized companies made profits.

d. Long-term liabilities of SOEs have not been solved. For example, JNR Settlement

[22] Fukui, Kaochiro *Japanese National Railways Privatization Study,* the *World Bank, 1992*

[23] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Institutional Framework,* Institute of Developing Economies Japan External Trade Organization, 1999

Corporation has left debts of US$ 224 billion, which remain a huge burden for taxpayers.[24]

2.2.2. Case Study I: Japan Telecommunication Market

Japan's two stage-reform, which applied the rate-of-return regulation first and RPI-X regulation subsequently, yielded different outcomes, which shed light on the advantages and disadvantages of both two methods.

A. First Stage Reform in 1985

The main method of regulation used for privatization during this first stage is rate-of-return. However, the outcome was not as desirable as the government had anticipated.

a. Rates Change:

i. Rates Raised in Monopolistic Sectors

Due to a re-balancing of rates, the rates of long-distance calls were lowered, while those of local calls were raised. In 1985, the basic charge for NTT's subscribers increased from 1,550 yen to 1,750 yen, and local calls by use of public telephones from 10 yen to 30 yen.

ii. Rate Gap between Japan and Foreign Countries

There are still big differences in rates between Japan and other foreign countries. For example, Japanese telephone subscription charges on average are 4-13 times higher than that of the USA, the UK, Germany, and France. Short-distance leased circuit line charges are 3-6 times higher than those of New York and London.[25]

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[24] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000

[25] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Institutional Framework*, Institute of Developing Economies Japan External Trade Organization, 1999:26

b. **Rate-of-return:** Even though rates were substantially reduced for some services, they were still quite high when compared internationally. This was mainly due to the scheme of price regulation. In the UK, the reform introduced price-cap regulation. This forced carriers to reduce rates as well as provide an incentive for efficient management. Japan retained the rate of return regulation which kept the rates high. [26]

B. Second Stage

The second stage reform on NTT was initiated in December 1996. As for regulation on pricing, the rate-of-return regulation was replaced by a price cap regulation.[27] The legislation for implementing a price cap for telephone charges was passed by the Diet in May 1998. The main features are the following:

a. Aims of the Price Cap: Under a price cap, since carriers are able to freely set rates as long as they do not exceed the cap price, it gives carriers more freedom and incentive in terms of management regarding the rates charged, which in turn promote efficiency. Therefore, it was no longer necessary to ask the authorities for their approval of rate changes, as in the rate-of-return regulation. It also implies that the authorities will not be able to regulate carriers beforehand; rather, they will have to cope with the problems after they occur.

b. Criteria to Choose Services Covered by a Price Cap: The price cap covers services that are indispensable for daily life and the economy and has a low level of competition. To determine which services are to be covered by a price cap, the following

[26] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000:170

[27] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000:170

issues were examined: i) Contents of services, characteristics of users, number of users, penetration rates, and future trends of services; ii). Number of carriers, market shares, rate levels, and international rates. The following services were to be covered by caps: Local calls, ISDN, and Leased circuits. [28]

In sum, two different types of regulations were applied in Japan's telecommunication market in different stages. The results seem to suggest that the RPI-X method is a more suitable for natural monopoly to generate the efficiency when privatizing this type of industries. However, drawing from UK's privatization experience on water utilities under the same RPI-X method, necessary adjustments could be made in order to tailor the needs and different characteristics of an industry.

2.2.3. Case Study II: Japan National Railways (JNR)

A. Background

The privatization of *JNR*, Japan's largest public corporation, was the largest in scale. The privatization of *JNR* was among the most critical tasks of the Provisional Committee. In 1980, JNR employed nearly 414,000 workers and its huge annual losses were increasing annually. In 1987, *JNR* was broken up into six regionally based railroad passenger companies and a seventh company was created to handle freight transportation for the entire country (*JRs*). 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 *JRs*. The *JNR Settlement Corporation* planned to repay US$91 billion by selling *JNR*'s real estate and stocks while the outstanding US$106 billion

[28] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Institutional Framework*, Institute of Developing Economies Japan External Trade Organization, 1999:44

was to be paid by the government, that is, taxpayers' burden. [29]

B. JNR Privatization Process

In July 1985, the Supervisory Committee submitted it written opinion concerning the restructuring of *JNR* to the Prime Minister. In April 1987 *JNR* privatization was initiated, which consisted of two phases.

In the first phase, *JNR* was converted into a stock company and government control was relaxed. 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. In the second phase, all stocks were sold to private investors, thereby completing *JNR*'s transformation into a privately owned company. The government supervision and restrictions on the new companies were reduced to a minimum so that a new management system, in which management can effectively exercise its responsibility and authority.

Because *JNR* in 1980s was virtually in a state of bankruptcy, it would have been difficult to sell stock directly to private investors. So this two-phase approach was adopted in order to provide an intermediate stage.

a. **First Phase: A**lthough *JRs* have operated as commercialized stock companies, all the shares were still owned by the *JNR Settlement Corporation*. As soon as the *JRs* meet the listing requirements of the Tokyo Stock Exchange, the shares of *JRs* would be listed and sold to the public and hence complete the transition to private enterprise.

The Exchange requirements are: **1)** Net assets must be twice as large as paid-in-capital; **2)**

[29] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000:22.

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; **3)** A dividend must have been paid in the immediately preceding period; and **4)** The company must have been in business continuously for at least five years.

It took seven years for three *JRs* to meet the above requirements and complete the first phase. When the first phase was completed in 1992, the government and the *JNR Settlement Corporation* began to sell shares, completing the sale of all stocks within four or five years.

i. Passenger Railway Division was Divided into Six Companies

The companies were: 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 theses companies maintained solid managerial bases. The *Shinkansen Holding Corporation* was established. The Management Stabilizing Fund was created for smaller passenger companies to offset the imbalance between revenues and expenditures. The *JNR Settlement Corporation* provided the capital for this Fund.

ii. Remaining $197 Billion Liabilities were Assumed by *JNR SC*

Established as the successor to the old *JNR, JNR Settlement Corporation* also received the shares of the *JR*s and the surplus real estate of *JNR* as well as the redundant workers. The remainder debt is expected to be borne by the general budget account.[30]

iii. *JNR* had around 200,000 Redundant Workers in 1980

The government actively promoted various measures to secure job changes for these workers.

[30] Fukui, Kaochiro *Japanese National Railways Privatization Study*, the World Bank, 1992

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 late 1980s. Finally, the number of remaining *JNR* employees transferred to the *JNR Settlement Corporation* in April 1990. Only 1,050 employees were ultimately dismissed because they refused to move to newly allotted placements.[31]

b. Second Phase: The main tasks in the second phase of privatizing JNR were the following:

i. Debts of *JNR Settlement Corporation*

A major portion of $197 billion of *JNR*'s debts was reassigned to the *JNR Settlement Corporation* along with the real estate and shares of the *JR*s. These debts were 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 planed 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.

ii. Sales of *JR*s Shares.

As the *JR*s met the listing requirements of the Tokyo Stock Exchange, their shares would be listed and sold. Three of the *JR*s have already met the requirements and the sales of their

[31] Fukui, Kaochiro *Japanese National Railways Privatization Study*, the World Bank, 1992

shares began in 1992.

C. Evaluation of JNR Privatization

Overall, privatization of JNR is recognized as a success after more than 10 years of experience. Services have been improved, facilities have been renewed, and train schedules have became more reliable. Fares for the main Honshu Island companies were not raised except for some adjustments in line with the introduction of a national consumer tax.

The general performance (transport volume and profits) of the six newly created passenger railway companies and the freight company (*JRs*) has been considerably higher than that of *JNR*. *JRs* became profitable, reduced costs and increased efficiency. Transport volume in terms of both passenger and freight augmented and labor productivity improved. It has 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. Furthermore, government subsidies for the *JRs* have declined substantially while the *JRs* are paying large sums in corporate taxed, thereby contributing positively to government finances.[32]

In addition to these quantitative changes, other changes have occurred such as improvement 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.

However, there still remains the heavy debt problem.[33] The *JNR Settlement Corporation* had an outstanding debt of US$224 billion as of March 1997. In particular, the sale of real estate

[32] Fukui, Kaochiro *Japanese National Railways Privatization Study,* the World Bank, 1992

[33] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Institutional Framework*, Institute of Developing Economies Japan External Trade Organization, 1999:17

was unsuccessful due to the land price deflation that followed the end of the so-called bubble economy. The corporation was dissolved in 1998 and the majority of its debt was transferred to the government. The burden then fell on smokers because the government raised the cigarette tax from December 1998 to repay the debt.

D. Lessons from JNR privatization

From *JNR's* privatization experience, some important lessons can be drawn, which can be applied to the privatization in the developing countries.

a. Importance of Careful Planning: The privatization of *JNR* was not carried out hastily. It took six years from the establishment of the Provisional Committee in March 1981 to the JNR's corporatization and restructuring in April 1987. The planning process alone took six years, while the implementation, including the selling of JR's stock, required 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.

b. Leaving the Sins of the Past 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 is 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 in the past. The new companies have been given a fresh start, on a stable financial basis, without trying to make up for past mistakes.

c. Timing of Business cycle: [34] Economic condition at the time of privatization is very

[34] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000, 28

important. At the implementation stage, the economic environment was favorable, making it easier to find jobs for a redundant work force. This favorable timing provided a boost to the economic performance of the newly created companies. Stocks can also be sold at higher prices to repay SOEs' debts. However, these results would not have been achieved during periods of recession. Thus, timing of privatization is of the utmost importance.

d. Separation of Privatization and Political Influence: Any organization carrying out privatization must have through 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 were independent from political influence, were able to formulate effective strategies. The successful privatization can only be achieved when the correct political 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.

e. Realistic Methods and Strategies: 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 long-term issues such as the sale of shares and assets, and the elimination of debt. This two-phase approach was an effective method to privatize a huge and virtually bankrupt organization such as JNR.

2.3. Korea Privatization

Privatization in Korea proves to be a long process, as the past decades of privatization effort in Korea shows. The initial concept of privatization could trace back to early 1980s, but yet to be completed until 2001. KT, a large public enterprise, was privatized very recently, which is too early to quantitatively evaluate the outcome and effect of privatization. The main goals of Korea case study are therefore to identify those factors which could lead to successes or failures in Korean privatization cases and to identify a feasible privatization policy issues such as role of capital liberalization, ownership, deregulation, etc, for the other countries.

2.3.1. Korea's Country Survey

Korea has two types of public enterprises: Government Owned Corporations (GOCs) and Government Invested Corporations (GICs), depending on whether they were subject to the Framework Act for GOCs.[35] The general rule that differentiated GOCs from GICs is government ownership. GOCs, which are more rigidly linked to public policy objectives, are more closely identified with the functions of the government itself. GICs were considered as having stronger commercial elements by the government and were thus allowed to enjoy greater freedom in their operations than GOCs.

AS of October 1998, all of the 26 corporations except KBS, in which the government's share was 50 percent or higher, were subject to the Framework Act. The Framework Act basically perceives a GOC as a subsidiary of the line industry and tries to constrain the management of the GOC to achieve the policy objectives set by the line ministry with as little costs as possible.

[35] Nam, Il Chong, *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2001

A. The First Stage

a. The Initial Conditions: The first privatization program was implemented in the early 1980s.[36] Privatization was one component of a general liberalization policy, which the government adopted in 1980. It was believed that Korea's economy required a more rapid development of the financial sector. Addressing an increasing problem of inefficiencies within the public enterprise set, the government passed the Government-Invested Enterprise Management Law in December 1983, which introduced a performance evaluation system for public enterprises. In 1987, privatization was aimed at the development of private enterprise in the industrial and financial sectors. The plan was intended to reduce the inefficiencies of public enterprises, alleviate the financial burden of the government, and enlarge the size of capital in the privatization program.

b. Contents: In the early 1980s, four financial institutions including *Hanil Bank, Korea First Bank, Bank of Seoul and Trust Company*, and *Cho-Hung Bank* were sold to private firms and investors using asset sale method. Buying parties were both large private firms and banking firms, which are themselves public enterprises. In order to prevent ownership and control by a single interest group, restrictions were placed on maximum equity holding and voting rights. Firms and individual investors were allocated 50 percent each, with a share limit of 5 percent for firms and 5,000 shares for each individual investor in the first issue. The ownership limit was 8 percent after it was circulated. The major shareholder on privatized financial institution got 7.9 percent of total shares after four years

[36] Kang, Shin Il, Korea's Privatization Plans and Past Experiences, Working Paper No; 8823, Korea Development Institute, Dec 1988: 3

circulation.[37]

c. Evaluation: The first privatization in Korea cannot be considered as a straightforward success. If we use performance indicators such as total profit, the average rates of return and sales per employee, etc, to evaluate the effectiveness of privatization, the privatization of three companies (*Korea Line Corp*., *Korea Shipbuilding and Engineering Corp*., and *Korea Dredging Corp*) did not improve their performance. The deficit increased and the average rate of return declined though sale per employee increased due to competition in the market. The government's deregulatory efforts over this period since 1982 fell short of public expecations. [38]

On the other hand and general speaking, six firms including *Korea Air Lines Co*. and the *Korea Express Co*. showed increase in efficiency after privatization. Two firms including *Korea Line Corp*. and *Korea Salt Co*. showed decreased in efficiency after privatization. The effect of privatization on the other seven firms including *Inchon Iron and Steel Co*., *Hanil and Cho-Hung Bank*, has been less significant.[39]

d. Lessons: Several lessons can be drawn from Korea's experience on privatization. One of them is that, for the efficiency of the monetary market, the privatization of commercial banks may be a necessary condition, but is definitely not a sufficient condition.(Bon-Ho Koo, 1985)[40] The government has only slightly reduced its control over bank organization in practice and, here exists an excessive fragmentation of interest rates.

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[37] Kang, Shin Il, *Korea's Privatization Plans and Past Experiences*, Working Paper No; 8823, Korea Development Institute, Dec 1988:12

[38] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 37

[39] Kang, Shin Il, *Korea's Privatization Plans and Past Experiences*, Working Paper No; 8823, Korea Development Institute, Dec 1988: 17

[40] Bon-Ho KOO, *The Experience of the Republic of Korea*, Asian Development Bank, 1985:199.

Furthermore, direct credits by the government have continued to grow so that the banks involved have operated more as a conduit for government funds rather than as financial institutions with independent decision-making authority.

In sum, the privatization of commercial banks has done little to enhance competition and efficiency in financial markets in Korea. The main barrier behind is heavy indebtedness of the corporate sector, which is the biggest constraint on full liberalization of interest rates. The liberalization of interest rates, which would have resulted in higher interest rates, was strongly opposed by the big corporations, which argued that higher interests rates would weaken international competitiveness and cause inflation by increasing production costs.

Another lesson to be learnt is government's failure to undertake necessaryderegulation while implementing privatization. On the contrary, the government has continued to impose regulations on the term structures and on fund management, which have had harmful effects for profit-oriented managers. Broad deregulation along with privatization is very much needed.

B. The Second (Recent) Stage

a. Prior to Financial Crisis: In 1994, Kim, Young Sam administration commissioned a comprehensive study of several public enterprises, including *KEPCO, Korea Telecom (KT), POSCO*, and *KT&G*. Privatization became one of the key economic policies of Kim, Young Sam administration, which kept pushing for a tangible outcome. In late 1997, the Kim, Young Sam administration introduced the Act for Privatization and Improvement of the Efficiency of Large Public Enterprises, generally referred to as the "Special Act on

Privatization", to promote privatization of four large public enterprises.[41]

i. Content

The Act targeted four public enterprises (*KE&G, KT, KOGAS*, and *Korea Heavy*), and had two main elements. First, it put restrictions on the ownership of all four public enterprises in order to prevent chaebols from acquiring controlling interests. Specifically, the combined share of any investor should not exceed 15 percent of each of the four public enterprises. Second, the Act stipulated that the board must consist of only civilians, thus removing the presence of the line industry as well as the Ministry of Finance and Economy from the board.[42]

ii. Evolution

The Special Act and other privatization measures introduced in 1997 were far from a complete privatization package. The Act failed to completely sever the ties with policy consideration and allowed the line ministry to maintain shareholder's rights. It still contained a clause that explicitly stated that the management of the public enterprises must consider public policy objectives when making decisions, which are not consistent with the privatization spirit of the Act. However, it was still the greatest step in the direction of privatization ever taken in Korea until that time.

b. After 1998 Financial Crisis: In 1998, privatization was far more comprehensive in scope and depth than any other privatization effort by all of the previous administrations. In July 1998, the Budget and Planning Commission, a new government agency created by the

[41] Il Chong Nam, *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2000

[42] Il Chong Nam, *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2000

new administration, that is, Kim, Dae Jung administration, announced an ambitious privatization and restructuring plan that covered 108 public enterprises. The main contents are summarized as following:[43]

Table 4: Korea Privatization Plan of 1998

Solutions	**Targeted GOCs and GICs**	**Targeted Subsidiaries of GOCs and GICs**	
Complete Privatization	Pohang Iron and Steel Co. Korea Heavy Industries and Construction Co. Korea General Chemical Co. Korea Technology Banking Corporation National Textbook Co.	12 Subsidiaries including Korea Telecom Card Co. and Hanyang Wood Co.	
Gradual Privatization	Korea Telecom Korea Tobacco and Ginseng Corporation Korea Gas Corporation Daehan Oil Pipeline Corporation Korea District Heating Corporation	28 Subsidiaries including Korea Telecom Powerel Co. Korea LNG Co., and Korea Power Engineering Co.	
Restructuring	Agricultrual & Fishery Marketing Corporation Korea Coal Corporation Korea Highway Corporation Korea Land Corporation Korea National Housing Corporation Korea National Oil Corporation Korea Resources Corporation	Restructuring	6 Subsidiaries including Korea Telecom Freetel Co. and Korea Nuclear Fuel Co.
	Korea Security Printing and Minting Corporation Korea National Tourist Organization Korea Trade and Investment Promotion Agency Korea Water Resources Corporation Rural Development Corporation Korea Appraisal Board	Liquidation or Merger	8 Subsidiaries including Hanyang Corporation and Korea Real Estate Trust Co.

Source: Korea Ministry of Planning & Budget

[43] Nam, Il Chong *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2001

As shown in Table 4, the 1998 plan classified public enterprises into three groups and prescribed different solutions for each of them. The first group is the set of public enterprises to be privatized, including *POSCO, Korea Heavy, Korea Chemical, KTB,* and *Korea Textbook*, along with 12 subsidiaries of various GOCs and GICs. For this group, pubic enterprises were to turn their shares over to private hands to allow the new owners to operate them based upon profit incentives. [44]

The second group consists of the public enterprises that eventually need to be privatized, but would not be privatized in the short-term. It included *KT, KT&G, KEPCO, KOGAS, Daehan Oil Pipeline*, and *Korea District Heating*, as well as 28 subsidiaries of GOCs and GICs. For this group, a gradual privatization approach was proposed. The GOCs and GICs belonging to the second group were all monopolistic firms in network industries, except for *KT&G*. Privatization of monopolistic public enterprises in the network industries requires a wide range of changes in regulatory and industrial policies.

The third group is the set of the public enterprises that would not be privatized. For this group, privatization was not considered as an option. It was only for internal restructuring or liquidation.[45]

c. Lessons: The 1998 Privatization Act is an ambitious plan for Korea to privatize most government owned enterprises. It could have been more aggressive if the government fully adopted the privatization plan by Il Chong Nam, the architect of the whole plan. According to Dr. Nam's perspective, the scope of privatization is substantially greater than is commonly believed and consumers would benefit directly or indirectly from appropriately

[44] Il Chong Nam and Joon-Kyung Kim, *Corporate Governance in Korea*, OECD Working Paper, 2001

[45] Il Chong Nam and Joon-Kyung Kim, *Corporate Governance in Korea*, OECD Working Paper, 2001.

designed privatization schemes in most commercially oriented SOEs. In the remaining industries, notably gas, electricity, transportation, telecommunication and other utility industry, it is necessary for the government to implement appropriate regulation such as RPI-X method when privatizing them.

2.3.2. Case Study: Korea Telecom (KT)

A. General Background

Korea Telecom (KT), a monopoly in network industry, has successfully completed the privatization in 2002 that was designed in 1994.

B. Review of Deregulation Process

a. In the 1980s: *KT* had a monopoly power in the international, domestic long-distance, and local exchange markets as well as in the mobile telephone market by the end of 1980s. Since public enterprises in Korea are not allowed to pursue commercial objectives and are required by law to service public objectives, *KT* thus was viewed as a tool to execute the policies determined by Korea Ministry of Information and Communication (MIC) and not as a profit-seeking firm.[46]

b. In the Early 1990s: Divestiture of *KT* started in 1993. During the 1993-1996 period, the government attempted to sell 49 percent of KT shares, but was only able to sell only 28.8 percent for the domestic investors. The remaining shares were eventually sold to investors in 2002.

In 1991, MIC announced a long-term plan to turn its telephone bushiness into a privatized

[46] Nam, Il Chong, *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2000

industry allowing private sector to enter into the international telephone market. However, only one entrant was permitted. It maintained a duopoly until 1996, and then allowed one more entrant in 1996. In the domestic long-distance market, the government maintained the *KT* monopoly until 1996, when it allowed entry of only one firm, *DACOM*. In the mobile market, the government allowed only one entrant in 1994 and three others in 1995. Over five years, rates for international calls have been adjusted several times, resulting in decreases in both the average rate level and the rate differential for the two operators.

c. In 1996: MIC issued new licenses for several service areas. Two licenses for PCS services were granted to two chaebols, *Hansol* and *LG*. The third went to a consortium controlled by *KT and Freetel*. All three new operators were required to use CDMA technology.[47]

There are specific restrictions on the ownership of *KT* shares in addition to the 15 percent ceiling for any single party. First, the Telecommunications Industry Act puts a ceiling on the combined ownership in *KT* by foreign investors at 49 percent. Second, the Act also forbids a foreigner to become the largest shareholder of *KT*. The second restriction on the ownership of *KT* was introduced to maintain *KT* as a Korean firm; however, no such restriction exists for *SKT* or any other telecom operator in Korea.

C. Characteristic of Korean Deregulation on *KT*

First, the government did not open major markets fully to anyone who wanted to participate but controlled the number of firms and selected the entrants. Second, in selecting new entrants, the government did not auction off licenses but instead employed complicated

[47] Nam, Il Chong, *Recent Developments in the Public Enterprise Sector of Korea*, Korea Development Institute, 2000

scoring systems. Third and most importantly, MIC has been playing three different and conflicting roles: owner of *KT*, promoter of industrial policies for the telecommunications industry and the related equipment manufacturing industry, and regulator of the telecommunications industry. As a consequence, *KT* has been run as an instrument of industrial policy rather than a profit-seeking firm. Overall, the deregulation of the telephone industry in Korea has not promoted the competition successfully.

D. Implication and Experience of Current Privatization

Korea's privatization process was rather slow and the initial results were rather unsatisfactory. The main lesson to be learnt of Korea's experience is that the implementation and completion of an appropriate regulatory framework is a precondition for success, as demonstrated by the experience of *KT* deregulation process in the past years.

- The regulatory framework should consider the changes that occur in the domestic and international market.

- Competition should be promoted and defended, with clear and consistent policies. Regulators should consider possible implications when introducing such a competition, including the effects on industrial structure and contracts, cross-subsidies and distributional concerns, and uncertainty.

- The price of services should be established in such a way that efficiency is required from the firm. Allowing the private firm a minimum return does not induce efficiency.

- The regulatory agency should have the resources, independence and the power to impose sanctions to the privatized firm if it does not comply with the contract in terms of the quality and quantity of the service provided.

- There should exist the possibility for consumers to participate in the defense of their

interest with enhanced Consumer's Protection Law.

- Finally, the regulatory framework should be ready before the actual privatization process starts, in order to avoid the mistakes of the first process of privatization.

The sequence for the privatization process should be as following: 1) Preparation and enactment of the regulatory framework; 2) Reorganization of the state-owned firm to make it more valuable for the private sector; 3) Actual privatization; and 4) Monitoring, supervision and control of compliance of commitments.

2.4. An Overall Evaluation

2.4.1. Merits of Privatization

In UK, Japan, and Korea, privatization of SOEs for past 20 years generally brought about the following benefits: 1) a free entry and competition; 2) cost and price reduction; 3) improved services; 4) increased efficiency and efficient resource allocation, and 5) temporary assets sales income to the government (which helps reduce fiscal deficits)[48]. Privatization of SOEs destroys monopoly or oligopoly in relation to the control and running of their activities. Their stocks are sold to the private sector. Combined with a wide range of deregulation measures, free entry produces competition. Intermediate goods and raw materials relating to these public utilities are also influenced by such privatization. Price mechanism turns to work in every domain as costs are reduced.

Competition also yields better and increased service for consumers. For example, the

[48]Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficienc y*, Edward Elgar Publishing, Inc., 2000, 12

privatization of telecommunications in each country has brought about lower telephone charges, better services, and increased opportunities to enjoy mobile phone services. Furthermore, assets sales of SOEs boosted government revenue that can also be utilized for external as well as internal debt repayments.

2.4.2. Demerits of Privatization

Demerits of privatization mainly include the following three aspects: 1) Unemployment; b) Reduced service in remote areas; and 3) Bad debt problems. It is well recognized that privatization of SOEs produces unemployment.[49] If there were no provisions to reallocate retrenched workers, unemployment would increase, which may result in serious social problem. Services to remote areas tend to be shut down or cut back as privatized utilities often ignores unprofitable areas which were previously subsidized by state-owned monopolies.

Unperforming SOEs generally have huge stranded debts. When these SOEs are privatized, the debts owed by the SOEs have to be handled carefully by the government. For example, the problems surrounding the huge debts of the *JNR* have not yet been solved and remain a heavy burden on the national treasury and the people of Japan.

2.4.3. Lessons and Challenges Ahead

Promotion of competition and efficiency is the key goal of privatization. Privatization is not only a matter of selling shares of a state-owned industry because transfer of ownership doesn't guarantee the competition. The underlying issue is to improve industry performance

[49] Kagami, Mitsuhiro and Masatsugu Tsuji, *Privatization, Deregulation and Economic Efficiency*, Edward Elgar Publishing, Inc., 2000: 12-14

by increasing the role of market force. To achieve this goal, other instruments and measures for promoting competition must also be adopted. From UK and Korea privatization experience, depending on specific conditions, each country's privatization plan must be part of a whole scheme tailored to the particular condition of each industry.

A. Criteria

Table 5: Enterprise Conditions[50]

Country Market	Competitive Market	Non-competitive Market
High capacity to regulate the market friendly	Sell	First ensure establishment of appropriate regulatory environment; then sell
Low capacity to regulate the market unfriendly	Sell, with attention to competitive conditions	Consider privatization of management arrangement Establish appropriate regulatory environment; then sell

Source: *Privatization: Principles and Practice*, International Financial Corp. 1995

For the commercially oriented SOEs in a competitive market, basically the government should just sell them as soon as possible. For the natural monopoly industry in a non-competitive market, it is essential for the government to install appropriate regulatory like RPI-X method prior to privatization.

B. Key Obstacles to Privatization

The past experiences of privatization illustrated several key obstacles for a country moving towards privatization.

[50] Song, Dae Hee, *Public Enterprise Management Reform and Its Privatization*, Korea Institute of Public Finance, 2001

- Inappropriate design of privatization strategy (in terms of scope, technique, sectors and institutional capability of the government)

- Underdeveloped capital markets

- Poor preparation of enterprises for privatization or divestiture (such as inadequate accounting and auditing, treatment of losses, or social and environmental safety nets)

- Unclear and weak institutional framework: decentralized (ministerial/ provincial level) or centralized (such as an independent privatization committee under the head of state)

- Insufficient transparency and flexibility in terms of the method of privatization, balancing ownership and control (corporate governance)

- Lack of strong high-level political commitment

- Lack of appropriate legal frameworks (e.g., property rights, foreign ownership, bankruptcy laws)

It is not surprising that both Japan and Korea experienced a two-stage development process, since in the initial stage a sound environment for privatization was not in place. Relatively speaking, the external conditions in UK were superior to those in Japan and in Korea, in terms of market economy's maturity, and capital market development.

There are some supplementary measures for implementing successful privatization programs in other countries:

a. Provisions to enhance competition and to prevent monopoly

-Liberalization in new entries, pricing, products

-Monitoring device required

b. Measures to cope with the vested interest groups

-Persistence from employees: employ share ownership

-Transparency in the use of revenue from SOE sales

c. Characteristics of well-designed privatization program:

-Gradual selling of SOE shares with consideration for the capacity of the securities market

-Open door policy to foreign investors

-Avoidance of lump sum sales of SOE shares that may result in low selling price and low revenue to the government

-Various approaches

C. Necessity of Due Diligence

The economics of privatization cannot be separated from the economics of competition and regulation. Ownership arrangement has important influence upon the incentives of decision makers in firms, but their behavior equally depends upon the stimulus of market forces and mechanisms of regulation.

For the private firms with extensive market power such as a monopoly, efficient profit seeking behavior cannot be expected to lead to socially efficient results. It is imperative for privatization to be accompanied by adequate measures to reduce and contain market power. Where feasible, the scope of competitive forces should be expanded by the effective removal of barriers to entry and by restructuring the dominant enterprise.

As the Japan case shows, where monopoly power still remains, the task is to devise regulatory mechanisms that encourage internal and allocative efficiency and discourage strategic behavior by the firm towards the regulatory authority. We have seen that *NTT* with monopoly power has been seriously flawed. The desire to limit the burden on regulators has often resulted in limiting the effectiveness of regulation. RPI-X price regulation has been introduced in several industries to hold the fort. The effectiveness of regulation in the future will depend largely upon the capacity of the regulatory bodies nominated by the government.

CHAPTER III

IMPLICATION AND SUGGESTION FOR CHINA SOES REFORM

China is a large country in transition, moving from centrally planned economy to market oriented economy. In this context and process, it is expected that privatization will be an important policy instrument and objective.

3.1. Background of China's SOEs Reform

3.1.1. Industrial Performance on China's SOEs

China has over 100,000 medium and large-scale SOEs, about a third of which are incurring losses. Numerous indicators demonstrate China's SOEs inefficient management and their deteriorating profitability. Measured by output, the share of SOEs in the Chinese economy has declined, from 75 percent in the late 1970s to about 28 percent recently. However, SOEs still account for about 44 percent of urban employment and as much as 70 percent of government revenues. The share of SOEs in deficit is above 43%, and higher than 75%, if hidden and repressed deficits are considered. The ratio of their total deficits and profits has been rising in the 1990's, when the average rate of profits has declined to almost none. China SOEs started to make net losses in 1996 and their profit decreased by 42.5% over 1995. In 1997, the net losses increased, up to 94.3 billion yuan. Among the 6,599 large and medium sized SOEs, 39.1% of which made losses.

Table 6: Shares of State and Non-public Sectors (%)

	State Sector Gross Industrial Output	Fixed Capital Investment	Urban Employment	Non-public Sector Gross Industrial Output	Urban Employment
1978	77.6	n.a.	78.3	n.a.	0.2
1980	76	81.9	76.2	0.5	0.8
1985	64.9	66.1	70.2	3.1	3.9
1990	54.6	66.1	62.3	9.8	5.7
1995	34	54.4	59	29.4	24.5
1996	28.5	52.5	56.7	32.1	28
1998	28.2	54.1	43.8	40	46.7

Source: China Statistical Yearbook, various editions

The above table shows the SOEs' share of industrial production and employment has been declining since 1978. It also shows the SOEs' industrial output has declined in relative terms, while their investment share did not change very much. This implies that their investment efficiency has been deteriorating. [51]

The Chinese government is fully aware of the poor performance of SOEs that have hurt economic development in many aspects. In terms of macroeconomic implications, channeling of resources into loss-making SOEs for political and social consideration means inefficient allocation and certainly constrains the economy's ability to generate balanced and sustainable growth.

The use of subsidized credit and government transfers to support SOEs is inflationary.

Policy lending by centrally controlled banks to SOEs creates fiscal burden on the central government and thus impedes the government's ability to fund social security, education, and

[51] Katsuji Nakagane, *SOE Reform and Privatization in China*, Discussion Paper CIRJE-F-95, 2000

infrastructure. The Chinese government is seeking to convert its four giant specialized banks into commercial institutions. These banks control the bulk of banking assets that are critical to China's financial stability. However, their transition has been a challenging task due to the large amounts of policy loans and other non performing loans.

3.1.2. Performance on China Private Sector

The private sector is the most dynamic segment of the Chinese domestic economy. It has blossomed into a major contributor to China's GDP. By 1998, the domestic private sector accounted for 27 percent of GDP, ranking second after SOEs. Up to 66 percent of industrial output came from private sector in 2000. In addition, more than 1.1 million workers laid off from SOEs were absorbed by the private sector. The impressive development of the private sector is in sharp contrast to the stagnation of the SOEs and collective sectors. Private sector has been growing at the rate of 20 percent over the past few years. In 1999, private sector represented two thirds of total industry added value. In contrast, SOEs has been declining at the rate of 15 percent yearly.

3.2. China Recent Reform on SOEs and Remaining Problems

3.2.1 Origin of "Three-Year Bail-out SOEs Reform"

The rapid development of the private sector and its impressive performance in the 1990s has been a catalyst for SOEs reform. Various policies to save and reform SOEs have been launched: Corporation Law was enacted; stock markets were opened; and substantial financial aids to settle their bad performing loans were provided. Several types of SOEs restructuring programs were also tested to provide them incentives. However, these measures turned out to be ineffective, as the SOEs kept losing their shares further in the

market. SOEs' financial difficulties became aggravated with millions of their workers laid off. Under such situation, a new SOEs reform named "Three-Year Bail-out SOEs reform" was adopted in 1998. which turned to be another failure in 2001 when the tenure of the reform terminated.

3.2.2. China SOEs Reform and the Outcome

A. Goal and Content

Facing the great financial difficulties of SOEs, the Chinese government decided to launch an intensive reform on SOEs in 1998. The agenda was to solve the main problems rooted in SOEs within three years. The main goal of "SOEs reform" is making majority of SOEs profitable and successfully establishing modern enterprise system. The government categorized SOEs into three groups: about 50 percent of them have no future, about 40 percent could be turned around, and that the remainder, or 10 percent, shows promise. The intended fate for the first group is a managed and gradual exit from the market. Their bad debts are being transferred to four state-approved asset-management companies. The SOEs in the second group are being prepared for sale to foreign or domestic private investors. Those in the third group are being listed on the stock markets.

B. Official Outcome

In 2001, Chinese government declared that China has basically attained its goal of reforming the state-owned-enterprises (SOEs) within three years. Relevant figures were shown to prove that China had successfully stopped the continuous losses and increased the profits of SOEs by the end of 2000. Within three years, China public firm reduced losses by 33.35 billion yuan. Official figures show that by the end of 2000, 70 percent of the 6,599 large

SOEs in manufacturing with losses reported that they had stopped making losses and began to make profits. The number of money-losing SOEs had been reduced by 4,391, accounting for 66.5% of the total 6,599 SOEs in 1997. Many SOEs had been shut down or put into bankruptcy. Some of the remaining SOEs have become profitable again and the rest of them have either been merged or restructured into share-holding companies.

Specifically, the outcomes of the SOE reform have these aspects:

a. SOEs Began to Make Net Profit in 2000: The figures from Ministry of Finance indicate that China's SOEs and state share holding enterprises made a net profit of 283.38 billion yuan in 2000, an increase of 147.3% than 1999; and 147.8 billion yuan more profits than 1994, which is the highest in records. The total (excluding profits from financial institution) is 191,000, of which total assets are 16,006.8 billion yuan, an increase of 10.2% over 1999.

b. A Modern Enterprise System in SOEs has been Established: It has been established in 84 percent of the 520 state large and medium-size SOEs. Debt-to-equity swaps were carried out, more enterprises were listed on the stock exchanges and boards of supervisors were set up for key large SOEs, promoting transformation in their operating mechanism and improvement in their performance.

c. Taxes were Paid on Time: In the past, collecting taxes on SOEs were difficult because seldom SOEs can make profits. In 2000, however, evidence from the National Taxation Bureau revealed that there were no more tax delays from SOEs.

d. 13 Million Laid-off Workers were Employed: China's laid-off workers has totaled 21 million in the past three years and been reduced by 15 million so far through

reemployment process and other means.

C. Behind the Success Story

If three-year efforts can successfully improve the poor performance of SOEs without change of their ownership, it would be a real success story. Even though figures shows SOEs made a big profit of 283.38 billion yuan, and 70 percent of total 6,599 large and medium SOEs have witnessed turning–arounds, it does not necessarily mean they would not relapse into trouble again, unless there is a fundamental turn in their competitiveness and innovative capability. Moreover, behind the official figures, some facts require further analysis.

a. The Main Components of SOEs Announced Profits in 2000: First, most of the profits came from policy support by the government. 16 billion yuan of net expenditure on SOEs was decreased in 2000 because debt-to-equity swap and time difference between end point of interest and declining interest in 1999, which accounts for 12% of the total profits of SOEs success. Increasing the export tax refund increase the total profits around 20 billion yuan, i.e. 15 percent of total profits. Moreover, Chinese government injected 148.66 billion yuan to balance SOEs insolvent debts, hence increase the total profits of SOEs in another way. Secondly, external environment also was also favorable. Because world oil price hiked in 2000, *China Petroleum and Gasoline Corporation* made huge profits, which accounted for 80 billion yuan or so, representing 60 percent of the total profits of SOEs in 2000.

Using a rough estimate, the policy and external environment contributed more than 80 percent of SOEs' profits in 2000. In other words, in the recent SOEs reform, privatization did not have a significant impact on increasing profits, even through 283.38 billion yuan profits was made. The internal profits-making capability of SOEs did not improve during the past three-year reform.

b. Huge Losses: Comparing SOEs to private sector, 32.4 percent of SOEs incurred losses by the end of 2000, 13.8 percent point higher than private sector. Also, some new SOEs went to losses while some old SOEs get out of the loss. Among 3,640 major money-losing SOEs, 1,469 are among the old money-losing SOEs since 1997; 2,171 are the newly money-losing SOEs. Those newly money-losing SOEs have 70.4 percent of total losses, 1,602 million yuan on average per enterprise , 61.3 percent higher than old money-losing SOEs.

c. Reliability of the Data and Statistics: One internal survey by China National Audit Office (CNAO) in June 2001 showed that some corporations were found to be violating corporate principles and regulation. False information of assets, liabilities, P&L and accounting were found. About 68 percent of enterprises are found cheating on the accounting rules. Also, dodging bank debts, putting up private treasury and un-standardized operation have caused a total 22.8 billion yuan losses of state-owned assets. The audit also found 78 cases of violations with 74 of them handed over to judiciary organs, involving an amount of 1.352 billion yuan.[52]

d. Corruption: Corruption of SOEs managers was pervasively spread. Since lack of the property right and external auditing system, the corrupted behavior could not be easily controlled and uncovered. In 2001, the State Discipline Inspection Department retrieved economic losses amounting to 3.5 billion yuan. The Department has received over the past year, 10,829 cases, of which 6,07 cases were initially verified; 2,856 cases filed and 1,874 settled with 2,920 persons given the disciplinary and administrative punishment and 252 handed over the judicial organs, thereby retrieving a loss of over 2.1 billion yuan. It has also sorted out 1,019 clues of case and 2.31 billion yuan illegal money with 1.41-billion-yuan of

[52] CNAO press release on cases SOEs violating laws and regulation, June 2001

direct economic loss redeemed through effective supervision.

D. Main Reasons for Failure

Chinese SOEs all have the main characteristics and weakness of a public sector, which contribute to three main historical sources of the problems for these SOEs: 1) Inefficient internal governance systems due to inherent unclear property right; 2) Lack of incentive; and (c) Weak monitoring. The solution to these chronic problems is privatization. Privatization is essential to maintain the dynamics of the shift from centrally planned economy to market economy. It will also help to eliminate inefficiency and waste in the economy and create a robust market economy.

However, the Chinese government has officially refused to implement a broad range of privatization policies. They still adhere to a long held principle of "public ownership as basis". China's ideological antagonism against a concept of privatization is fairly strong. Due to lack of transfer of property rights, the reform on SOEs is bound to face many difficulties.

a. Unclear Property Right: Public property clearly belongs to all the people represented by the state, as a SOE is, by legal definition, owned by the Chinese people. Being owned by 1.3 billion people inevitably means nobody directly owns the firm. This widely dispersed and ambiguous ownership structure induces the excludability problem. In different periods and following the policy shifts, SOEs have been subject to opportunistic behaviors and appropriations by those who have direct control of or influence on the firms' assets. There appropriations may include, for example, asset stripping by managers and other insiders; shirking by workers; predatory taxed, fees and bribes levied by government officials; and non-pecuniary benefits for employees and their relatives in the form of housing

and social services.

While the 1.3 billion people have no way to exercise direct control over SOEs, the real control rights are delegated by the central government to ministries, local governments at different levels and their industrial bureaus. In order to limit the opportunistic behaviors of managers and officials at lower levels, the governments at higher levels have to keep tight control over SOE operation. Thus government interventions become inevitable.

The state has to bear the losses made by SOEs, assuming an unlimited liability for SOEs. The asymmetry between lower jurisdictions that are interested in extracting value from the SOE pool and higher jurisdictions that replenish value, through either direct subsidies or the state bank system, creates a serous moral hazard problem for opportunist local officials. It has induced an accumulation of bad loans and non-performance debt within the SOE sector that renders the financial system vulnerable to external shocks and crises.

b. Lack of Incentive: Under the traditional centrally planned system, managers appointed by the government were in fact government officials; that is, they had no autonomy. They could not pursue the business goals of their enterprises. Although they lacked the means by which to improve the operations of their enterprises and to motivate their workers, they could not embezzle state enterprise's profits and property for their political career would be in jeopardy. After the micro-management reforms, the state enterprises gained on increasing amount of autonomy. Because of lags in the reform of the macro policy environment, the information costs of checking on managerial discretion are still prohibitively high. Consequently, the more autonomy the state delegates to state enterprises, the greater will be the motives and the more abundant will be the opportunities of managers and state enterprises workers to cheat state profits and property.

In China, enterprise reforms were carried out without matching reforms to the macro-policy environment. There was no mechanism by which to objectively appraise the performances of enterprises and managers. As policy induced losses or profits continued to exist, the profitability of an enterprise cannot accurately reflect its performance. It is very easy for loss-making enterprises and their managers to shirk responsibility and escape punishment, while profit-making enterprises are not necessarily efficient, nor are their managers' efforts. Thus, operational efficiency and profit level are not good bases for rewards.

As managers are not punished or rewarded effectively, they are not willing to increase their income by aligning their interests with those of the state. On the contrary, they try in every way possible to increase the share of profits retailed by their enterprises, and to embezzle state property in order to maximize their personal income. As the autonomy of enterprises increases, the difference between the interests of managers and owners grow more pronounced, and managers become less disciplined. Not only is there no increase in the state's benefits, but the state's property is embezzled as well.

c. Weak Monitoring: The corporate governance is arguably the worst problem in Chinese public sector. Agency problem is very serious in public sector. In China's SOEs, the agency problems are further aggravated by the conflicting roles assigned to the managers and to the supervising bodies, and by the fact that SOEs assets are akin to public goods that suffer from free-riding problems.

On the other hand, private firms are much less affected by these problems. Monitoring costs are lower, and thanks to their close relationships, information can be easily shared by the member firms within the community. Furthermore, incentives can be aligned more easily because of member firm's common interests and the fact the private firms share financial

risks.

3.2.3. Financial Sector Reform and Outcome

A. Recent Financial Reform Process

The government has launched a series of financial reform programs since the 1990s. Financial reforms included a commercialization of specialized banks, a reduction of direct lending typically known as a "credit plan", a separation between policy and commercial lending activities, a re-capitalization of banks, and entry and interest deregulations. In spite of these reforms, the financial sector has remained dominated by the wholly state-owned commercial banks (WSCBs) and intervened heavily by the government till today. [53]

As of 2001, the Chinese banking system consists of the four WSCBs, 3 policy lending banks, more than 100 commercial banks, about 3,000 urban credit cooperatives (UCCs), and about 42,000 regional credit cooperatives (RCCs), and about 160 foreign banks with branches or representative offices.

With respect to the financial sector restructuring, the following methods have been implemented: 1) Recapitalization; 2) Conversion of debt into equity; 3) Mergers, 4) Disposal of non-performing loans (NPLs), and 5) Closure and bankruptcy of insolvent financial institutions. [54]

As for the first measure, the government made a capital injection of 270 billion yuan ($32 billion) to the WSCBs in 1998 by issuing bonds. On the second measure, the Chinese

[53] Shirai, Sayuri *Assessment of China's Financial Reforms*, Economic and Social Commission for Asia and The Pacific, ESCAP-ADB Joint Workshop on Mobilizing Domestic Finance for Development, 2001:4

[54] Sayuri Shirai, *Assessment of China's Financial Reforms*, Economic and Social Commission for Asia and The Pacific, ESCAP-ADB Joint Workshop on Mobilizing Domestic Finance for Development 2001:7

government arranged a debt-equity swap of about 5 billion yuan in 1996 for *Everbright Trust and Investment Company*, since it could not meet its maturing debts. As a third measure, more than 2,000 UCCs were merged into 88 city commercial banks during 1995-1998 in accordance with the assessment of assets and capital, write-off of some bad debts, and encouragement of new shareholders. As a fourth measure, fours asset management companies (AMCs) were established in 1999 to acquire and dispose NPLs of the WSCBs. This suggests that 1.4 trillion yuan of assets has been transferred from the four WSCBs to the AMCs. As a fifth measure, the *Hainan Development Bank* and three TICs became highly insolvent and thus were closed in 1997-1998. In 1998, the People's Bank of China (PBC) closed *Guangdong International Trust and Investment Company* that incurred heavy losses and could not meet maturing debts.

B. Outcome of Financial Reform

Even the government exercised great efforts, the above financial reforms have remained largely marginal, and have not produced noticeable impacts on improving the performance of the WSCBs. Their profitability, capital adequacy, and loan loss provisions have remained low. Paid-in capital of the WSCBs declined relative to bank assets from 12.1% at the end of 1985 to 2.2% at the end of 1997. Their net worth declined rapidly from 13.2% in 1985 to 2.7% in 1997. Even though NPL of 1.4 trillion yuan were transferred to the AMCs, the four WSCBs still hold 25% of NPL. [55] If proper accounting methods were applied, all WSCBs would have found to face a negative net worth and thus would have been categorized s insolvent.

[55] Sayuri Shirai, *Assessment of China's Financial Reforms*, Economic and Social Commission for Asia and The Pacific, ESCAP-ADB Joint Workshop on Mobilizing Domestic Finance for Development, 2001: 8.

C. Main Reason of Poor Reform Outcome

China's financial reform process in some sense is quite similar to Korea reform experience. First, the government waited long time before enacting necessary legislation supporting financial market development. It was not until 1995, 17 years after China's reform and opening, that appropriate central bank laws were put in place. Commercial bank legislation also waited until 1995. This has resulted in state-owned banks remaining dependent on the government and government policy. Second, the banking system has not developed in a manner that promotes efficient payment and fund allocation mechanisms. High savings are not fully effective in driving economic growth, due to the weak channels and lack of incentives for interregional mobilization of capital. Third, financial liberalization has proceeded too slowly. This is evident from the government's using a regressive banking sector to maintain tight control over many aspects of business and economic decision-making. This leads to market distortions and to unexpected policy shifts as the government finds savings flows and investment decisions not working in accord with policy directives. Finally, interest rates have failed to assume the flexible role they play in advanced capitalist countries. The government continues to manipulate the interest paid on government securities, to satisfy investors who face only limited alternative outlets for investible funds.

However, the key obstacle to the implementation of drastic financial reforms arises from the problems of their borrowers—the poor and deteriorating performance of the SOEs. As discussed earlier, a growing number of SOEs have experienced a substantial decline in profits in the 1990s in spite of overall economic growth. This has not only caused a rapid deterioration of WSCBs's loan assets, but also has limited credit available to private firms by absorbing more than 75% of bank loans, which deterring the private sector' investment

growth. The poor performance of the SOEs is attributable to a number of factors.[56] The above-mentioned characteristic features of Chinese SOEs have produced problems unanticipated by the reform's framers, like stripping, decapitalization, wage manipulation and tax evasion. These problems undermined severely the performance of the banking sector.

3.3. Solution and Suggestions to Chinese SOEs

3.3.1. Solution for Chinese SOEs: Privatization

Reforms in SOEs including the banking sector are critical to China's long term economic growth prospects. China's entry into the WTO in December 2001 will expose the enterprises to international competition, makes these reforms even more urgent, and no less daunting. The suitable solution for poor performing Chinese SOEs is privatization. Private ownership is a necessary condition for strengthening the corporate adaptive capabilities when facing changes in the environment. Privatization is expected to make it easier for a government to promote competition. Reforming SOEs further would mean restructuring them into shareholding companies fully responsible for their own financial operations, using more market-based labor practices, and improving corporate governance.[57]

3.3.2. Suggestions for Privatizing Chinese SOEs

A. Implement Comprehensive Privatization Program

The first suggestion for China is to develop an overall privatization plan throughout the

[56] Sayuri Shirai, *Assessment of China's Financial Reforms*, Economic and Social Commission for Asia and The Pacific, ESCAP-ADB Joint Workshop on Mobilizing Domestic Finance for Development, 2001

[57] Song, Dae Hee, *Public Enterprise Management Reform and Its Privatization*, Korea Institute of Public Finance, 2001

country. Even as China attempted several reforms to improve SOEs performance, commercialization, rather than privatization has been the main agenda of large SOE reform. Property rights of the strategically important sectors are still firmly kept in the state hands. There is no real privatization plan yet. However, as stated earlier, without transfer of property right, privatization effort is unlikely to improve the efficiency and performance of large SOEs. The outcome of the recent reforms clearly supports this point.

B. Establish Clear Property Rights

Defining and clarifying clear property right is the premise to carry out an entire privatization successfully. China's SOEs reform has been carried out without any substantial development on ownership of enterprises. Ambiguity in property rights is one of the key obstacles to further market evolution and the privatization process. Clarifying property rights as well as changing property structure is certainly a tough task, for socialist economies with a lot of people of vested interest in public property in particular. However, until clarification of property rights, the privatization cannot be possible because this right cannot be really transferred and tradable.

C. Follow General Rules of Privatization

As a former pure planned economy, China's SOEs dominant the whole economy and the structure, unlike others countries like UK, Japan and Korea. There are large SOEs that represent to certain extent public interests in China. There are also remains a large number of middle and small SOEs, which are not related to the policy oriented issues at all. The scope of privatization can therefore be wider and more complicated than other countries. To distinguish different inherent features of these SOEs is very important, indeed a prerequisite before promulgation of privatization plan, that should be tailored in any case to China's own

situation.

The Chinese government should formulate different policy targets on various types of SOEs. It is our view that the vast majority of state owned enterprises in China should be privatized for the sake of efficiency and better industrial performance except selected industries like national defense. This of course does not preclude the government to play a stronger role for some SOEs even after their privatization while others SOEs can be simply sold out. For the small and medium SOEs, which are not related to the policy considerations, one can simply privatize them as soon as possible. For large SOEs, it is desirable to conduct a short-term and long-term privatization plan separately. For those public utilities, the government should privatize them as well but with the effective regulatory framework as UK and Japan did.

D. Utilize RPI-X Regulation for Natural Monopoly Privatization

Regulation is critical to the successful privatization of natural monopolies. As China has a large number of inefficient utilities in monopoly situation, how to successful regulate those industries will be a key issue. Price cap regulation will be a suggested method to apply in this case.

Price cap regulation (*RPI – X* regulation) has become a popular and rather successful form of regulation in many utilities industries in several countries. It originated from UK, and later widely applied in many other countries' privatization process. Since 1989, price caps have also been used in the United States to adjust the prices charged by the long-distance telephone company *AT&T*. Most state governments now employ some form of price cap regulation to govern the intrastate activities of their telecommunications suppliers. In New Zealand, a price cap is used to adjust *Telecom New Zealand*'s rental charge for a residential phone line. Price caps are also used in some developing countries. Malaysia, Mexico, and

Peru, for example, use them for telecommunications, and Argentina uses them for gas and electricity as well.

E. Choose the Right Time and Speed

Results of privatization and deregulation are affected by business cycles. During the economic expansion period, dismissal of SOE employees is relatively easy without creating serious social problems because redundant workers can be relocated or absorbed in a growing economy. Moreover, SOE stocks and real estate can be sold at a higher price. However, the opposite happens during a recession. Thus, the timing of the introduction of these policies is of utmost importance, especially when SOEs have heavy debt burdens.

Hasty liberalization can create turmoil. The speed of deregulation is hence another issue to be considered, particularly when markets are not ready for opening-up. Such a situation developed in Korea during Asia financial crisis. Hence, the speed, sequence, and timing of liberalization are important factors that must be considered. Furthermore, monitoring systems to guard against unexpected turmoil, for example, monitoring institutions, or at least information disclosures, for short-term capital movements in the case of global money markets, are urgently required.

F. Promote Active External Investors

There is a necessity to promote active investors in the capital of newly corporatized SOEs. Active investors could be domestic or foreign financial institutions, enterprises, individuals who are committed to monitoring and to being involved actively in the restructuring of newly corporatized SOEs through a minority stake in the capital of these enterprises. This is to counter-balance the effects of an “insider” control that has been getting stronger in these

countries. This is particularly important for large SOEs, which are to be corporatized but will probably remain under State control.

It would be helpful if the government could inform these enterprises of future privatization plan in the further reform process, in order to reinforce the new signals the government is sending out to them. These enterprises should progressively familiarize themselves with a control carried out by financial markets. In this context, there is a need to continue to implement new reforms concerning the legal system especially to protect the rights of minority shareholders (but who could be active), to allow a good functioning of the board of directors, to put pressure on these enterprises to have a better disclosure of their financial situation and a better transparency on their operation. Still the state could also keep some "golden shares" in the capital of large SOEs operating in some strategic sectors (infrastructure, military) which give the government the possibility to put its veto in an operation like the transfer of control to a foreign company.

3.3.3. Suggestion for Chinese Financial Sector Reform

The Chinese government is aware that the privatization of the WSCBs is a key to successful financial reform; however, it is held back by political obstacles. To make all the policies successful, it is better and essential for the government to adopt the following comprehensive measures suggested by ADB.[58]

First, it has to clean up and restructure and balance sheets of WSCBs before they become public. In this process, the government must strengthen the capital base of these banks through a further recapitalization and a promotion of financial bond issuance. However, the

[58] Sayuri Shirai, *Assessment of China's Financial Reforms,* Economic and Social Commission for Asia and The Pacific, ESCAP-ADB Joint Workshop on Mobilizing Domestic Finance for Development 2001.

absence of secondary markets for credit and collateral and inadequate property rights makes it extremely difficulty to transfer, sell the securities or assets of WSCBs, since the market price of the assets can hardly be realized and the ratio of realized asset values to book values is extremely low. Thus, improving a legal and institutional environment is essential to fulfill this goal. Moreover, the government should ensure that the AMCs with the skills and incentives to discharge their responsibilities and would ensure that their financial positions are soundly based (IMF 2000).

Second, the government needs to adopt global standards on accounting, auditing, and disclosure requirements, particularly with respect to potential listed banks. The government already tightened prudential regulation in 1998 and 2000; however, existing accounting principles appear to be largely problematic, especially as to the calculation of maturities of interest receivable and the principle of provisioning for NPL. Also, financial institutions should supply reliable, transparent business records, which make it easier for mergers, restructuring or closure of any financial [59] institutions. In other word, promoting standardization of information regarding financial institutions as well as enterprises is a prerequisite not only for a successful restructuring of the WSCBs and other financial institutions, but also for fostering sound capital markets.

Third, the WSCBs should be promoted to become more commercial-oriented and risk-conscious through reforming their corporate governance structure in accordance with the provisions of the corporate law and the law of commercial banks. This policy is essential not only to limit a further accumulation of NPL, but also to prepare for the fuller-scale entry of foreign banks that will take place within the next 5 years after the accession to the WTO. A further liberalization of interest rate is also a crucial step to improve banks' risk management

[59] Johnson, Christopher, *Privatization and Ownership,* Lloyds Bank Annual Review, 1988:131

skills.

Finally, and most importantly, more comprehensive SOE reforms must be undertaken with a further emphasis on ownership diversification, liquidation, mergers, and closure. Without fundamental resolution of the SOEs, the likelihood that the WSCBs become viable, solvent financial institutions is small. The prolonged maintenance of problematic WSCBs would eventually undermine China's economic growth through limiting a further expansion of private sector.

In a nutshell, the government should undertake more comprehensive and drastic steps for restructuring WSCBs. At the same time, further deregulations-properly-sequenced interest rate deregulations, and expansion of the scope of business, further entry deregulations for new banks that are well-capitalized and technologically-advanced should be adopted in order for the OCBs to become more viable and commercial-oriented. Moreover, the very poor performance of policy lending banks indicates a strong and urgent need for actions that would enable them to operate in a sustainable manner.

CONCLUSION

On the basis of a theoretical review, this paper examined the primary rationale and experience of privatization process in UK, Japan and Korea. From three country surveys and various case studies, several lessons were drawn for China, the largest developing economy in transition with challenging privatization process ahead.

In Chapter I, this paper analyzed the economic rationale for the privatization in explaining why property right matters in economical efficiency. It also clarified that under perfect market situation the privatization can simply promote the efficiency, while under imperfect market condition the government should promulgate necessary regulation to control the privatized monopoly industries**.**

In Chapter II, an empirical analysis was undertaken to explore the institutional linkage in selected countries: UK, Japan and Korea. Empirical studies have documented the dramatic growth of privatizations globally and the resultant efficiency gains. It concentrated on the economic aspects of the process, especially with reference to regulating methods. In case studies, the focus was on how the privatization could play a crucial role in improving efficiency and welfare. It also stressed that the economics of privatization cannot be separated from the economics of competition and regulation. Ownership arrangement has an important influence upon the incentives of decision makers in firms, but their behavior depends equally upon the stimulus of market forces and mechanisms of regulation.

In Chapter III, this paper analyzed the relative failure of China's recent SOE reforms and identified three typical diseases in the public enterprises which were discussed in Chapter I:

(i) Inherent unclear property right; (ii) Lack of incentive; and (iii) Weak monitoring. It is suggested that, the small and medium SOEs, which are not related to the policy considerations, could be simply privatized as soon as possible. For large SOEs, it is desirable to conduct a short-term and long-term privatization plan separately. For those public utilities, the government should privatize them as well but with the effective regulatory framework as UK and Japan did.

In conclusion, both theoretical analysis and empirical evidence support the view that private ownership is most efficient and hence privatization is most suitable in markets where effective competition prevails. China, though a socialist economy in transition, is no exception.

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