Korean SOE Sector Reform and Privatization: Changing Managerial Incentive and the Transfer of Control Rights

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Abstract

This article examines the current state-owned enterprise (SOE) sector reform programs used in Korea and suggests an alternative course. Although privatization gained considerable momentum, its privatization policy was compromised due to conflicts in its goals. There is a real need to realign the role of the SOE sector in the economy which involves radical restructuring of its present system through the control rights privatization of state monopolies. We argue that the current internal management reform policies designed to affect internal and external incentive of SOE managers are unlikely to succeed due to the politicized nature of the process. This leaves full divestitures of state monopolies as only viable option rather than soft reform measures that are currently being employed.

I. Introduction

The global cycle of privatization and nationalization of state-owned enterprises (SOEs) seems to have swung in favor of private ownership for the foreseeable future.[1] The movement towards the market-oriented approach also applies to debates concerning regulation and deregulation of economic activities,[2] and more broadly struggle between economic democratization and economic "celntralization (coordination)" movements in "command" or "mixed" economies.[3] Radical alteration of the balance

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between the private and the public provision of goods and services was necessitated by the following reasons:

- the poor performance of SOEs and mismanagement of state resources;[4)]
- the sizable deficits in both the internal and external balances of economies which forced governments to take macroeconomic stabilization measures;[5)]
- the disappointing record of past conventional SOE sector reform efforts that do not alter the ownership structure;[6)] and
- a shift in ideology towards limiting the growth of the public sector, whose role has been traditionally defined by the theories of market failures and public goods, and the promotion of economic development through private sector development.[7)]

Contrary to the global trend, however, the Korean governments privatization policy seems to have stalled for the foreseeable future. Its 1993 privatization plan, which sought to divest the governments shares in 58 SOEs and merge or sell assets in 10 SOEs by the year 1998, has been abandoned in favor of internal management reform or conventional approach (Mail Economic Daily (96/10/19).[8)] According to Vice Premier Han, instead of the control rights privatization of SOEs, it would concentrate on changing internal and external incentives facing SOE managers by introducing more competition, where viable, and allowing more managerial autonomy[9)]. Han stated that the government has placed an emphasis on the social welfare consequence of privatizing state monopolies and therefore would first introduce competition in industries that were dominated by Korea Gas Corporation, Korea Heavy Industry Corporation (generating facilities), and Korea Tobacco and Ginseng Corporation, although specifics are unknown.

We argue throughout the paper that because of relatively low political cost of the SOE sector inefficiencies and the force of bureaucratic internalities that sought to maintain the government intervention in the SOE sector, the state resorted to the internal management reform approach. This is evidenced by the states unwillingness to find the extent of SOE sector inefficiencies, which is likely to be larger than it is willing to admit. We argue that internal management reforms are unlikely to succeed and may even deteriorate the conditions of SOEs in the long run. This is because gradual and piece-meal reform policies allow the continuation of politicized and bureaucratic process. In addition, conventional reform measures do little to change the internal and external incentive of SOE managers. They are difficult to implement and even more troublesome to sustain in the long run. In addition, faced with the possibility of the expropriation of managerial and physical investments under any form of government ownership, whether partial or full, SOE managers lack incentive to invest in cost-reducing activities during the transition period.

Partial and gradual SOE sector reforms also confer little credibility to the government policy and therefore unlikely to harden the relationship between the state and SOEs. As the state retains an important role as part owner and regulator of privatized firms, especially those with monopolistic features, the result is compromises in gains from privatization. This is because unless the relationship between the state and SOEs is hardened through the full transfer of control rights, the politicized process in SOEs will continue to inhibit economic costs to the sector.

The organization of the article is as follows. Section 2 examines the current state of the Korean SOE sector and its productive efficiencies followed by the economic and institutional analysis of the current SOE sector reform and privatization policies in Section 3. Fundamental theories of privatization are examined in Section 4 to cast lights on the efficacy of the different privatization perspectives followed by conclusions in Section 5.

II. The Korean SOE sector

The SOE sectors budget for the year 1996 is estimated at around 8.8 trillion Won (an increase of 6% from the previous year), compared to the national budget estimated at around 6.3 trillion Won (Mail Economic Daily (October 9, 1996)). As Figure I illustrates, the SOE sector continued to expand during the 1983-91 period. The SOE sectors budget increased over 158% during the period while employment went up significantly during the period. Despite the fact that the number of SOEs and the number of SOE employees have been on the rise, the examination of the extent of inefficiencies in the SOE sector has not conducted in Korea.[10] With the exception of a

〈Fig. 1〉 The Korean SOE Sector (1983-1991)

	Number of SOEs			Employment			Budget (Billion Won)		
Year	1983	1986	1991	1983	1986	1991	1983	1986	1991
GEs	5	5	4	80000	78204	71584	325.83	305.88	284.55
GIEs	24	25	23	128000	134729	170824	120.29	1301.9	3439.8
GFEs	7	6	7	34000	29502	38597	423.22	522.34	829.4
SGIEs	49	71	90	43000	62400	93096	456.73	687.75	1673.4
Total	85	107	124	285000	304835	374101	2408.8	2817.9	6227.2

Source: EPB (1993). GEs, GIEs, GFEs, and SGIEs stand for government enterprises, government-invested enterprises, government-funded enterprises and subsidiaries of GIEs, respectively.

recent study by KDI(1996), the government rarely made these kinds of reports on SOEs available to the public. A simple comparison, however, reveals a significant performance difference: the SOE sectors gross profitability growth falling far behind the private sector (7.2% in the SOE sector versus 33.3% in the private sector between 1994 to 95), while the debt ratio is worsening in the SOE sector in comparison to the stock market listed private enterprises (KDI (1996)).[11]

Excess employment is another area where little empirical research has been done despite the fact that the SOE sector tends to exhibit relatively high proportion of labor costs to sales in comparison to the private sector. For instance, ten SOEs increased their personnel by over 30% in just three years since 1990 without the proportional increments to their sales. One particular SOE, Korea Coal Mining Corporation, spent over 69% of its gross sales on labor cost in 1995 (KDI (1996)). This is despite numerous government attempts at limiting the growth of labor costs in the SOE sector.[12] Although political intervention in hiring process has been limited to the appointment of top management positions, there are ways in which SOEs can add redundant labor force into their payroll. First, with the lax government policies in the SOE sectors R&D spending, SOEs can potentially abuse labor practices by hiding new hiring under the heading of R&D expenditures.[13] Second, SOEs subsidiaries are subject to little government control where SOEs can add redundant labor. According to Kim (1995), subsidiaries budget and labor costs grew faster than any other public sector: between 1983 and 1991, the number of subsidiaries increased from 49 to 90 and the number of employees went up by 116% (see Figure I).[14] In particular, Korea Development Bank and Korean Telecommunications Corporation each had 15 and 10 subsidiaries under their control which they used to ease overcrowding in the upper senior management, respectively.[15] Third, complex accounting procedures in the public sector make it possible for SOEs to hide extra labor under different headings. Last, by increasing contracted workers, SOEs can avoid increasing direct labor costs. Contracting out has been also used to award different political constituents for their contribution to certain political interest. Combining these with the difficulties of laying off public employees due to the current labor laws, excess employment issue may pose a threat of the viability of the SOE sector if the state continues to maintain control rights in SOEs.

Other Korean specific factors may also point towards a high degree of inefficiencies in the SOE sector and the public sectors in general. They are as follows:

(1) most SOEs operate in monopolistic or oligopolisitc markets with little or no market competition;

(2) government projects and social infrastructure investments have been used as a means of generating political funds[16];

(3) high degree of formal collusion and informal cooperation among political and

business leaders which leads towards explicit and implicit corruption (Park (1996) and Kim (1995));

(4) both the low political costs associated with inefficient SOE sector operation and the ineffectiveness of political monitoring mechanism[17] gave little external incentive for public managers and politicians to avoid rent-seeking behaviors (Shleifer and Vishny (1995)).

Overall, the extent of inefficiencies in the SOE sector is likely to be large as it possesses both X-inefficiency problems associated with monopolies as well as the SOE sector specific problems of politicized process.[18] This has led the Korean government to review its SOE sector policies. In the next section, we examine the complexity of the Korean SOE policy including its privatization attempts.

III. Privatization Policies

1. Economic Analysis

Although the Korean SOE sector is relatively small compared to other developing nations (Jones (1991)), the philosophy behind the Korean governments industrial policy has been the continuation of state involvement (Choi (1993), Stern et al. (1995), and World Bank (1988)) in all phase of economic development. Given the governments commitment to reform, however, the relevant question is whether gradual SOE reform process, through which performance evaluation systems[19] and partial cash-flow rights privatization techniques are utilized, is preferable to more sweeping approach of fully divesting public ownership in SOEs. We first examine the current conventional reform measures used and suggest an alternative course.

Broadly speaking, SOE sector reform measures can be categorized into four different types: first, enterprise-specific reforms, including internal management reforms and turnaround strategies;[20] second, SOE sector reforms geared towards clarifying the relationship of SOEs to regulatory agencies;[21] third, regulatory and industrial (competition) policy changes in order to improve the environment under which SOEs or privatized firms operate;[22] and fourth, governmental reform,[23] altering the government's role in the economy through divestitures and rationalization schemes. In each phase, governments have a variety of reform options at their disposal. For example, there are numerous privatization techniques governments can utilize, ranging from partial privatization through tenders to international public offerings. More often than not, governments approach the reform of the SOE sector with a combination of these techniques.[24]

In the case of the Korean SOE sector reform, the state has utilized measures that realigns the sectors role in the economy.[25] Realizing that most reform programs that tried to solve SOE performance problems without ownership changes faced numerous difficulties in the implementation process (Kikeri et al. (1992)), the government created a program that combined transitional SOE reform tools with privatization techniques. The reform measures sought to change the way the government and the SOE sector interacts, thus attempted to hardened the relationship between SOEs and the state.[26] The measures include the managerial performance evaluation system (MPES), which introduces a contractual obligation concept, and partial cash flow privatization of state monopolies, which forces the state to respond to private shareholders.[27] Korea Electric Power Corporation (KEPCO), Pohang Iron and Steel Company (POSCO), and Korea Telecommunication Corporation (KTC) were partially privatized using a broad-based ownership scheme. However, other SOEs or government-invested enterprises (GIEs) were kept under the state ownership and monitored through the MPES.[28] We will see that these conventional approach has a limited impact on the future performance of SOEs.

The belief that privatization is more effective than other SOE reform measures largely originates from the assessment that private ownership and monitoring provide a superior mode of production technique over others.[29] In the research thus far, privatization is considered to have the following advantages and we examine these issues more deeply in the following sections:

First, privatization process forces regulators and management, as well as other interested parties who have stakes in SOEs, to adjust their expectations of their respective roles, largely due to changes to the ownership and regulatory structure;[30]

Second, private sector monitoring, including that by private shareholders and capital market participants, tends to perform better than public monitoring because of the incentive-linked nature of capital markets;[31]

Third, the market for corporate control or the fear of corporate or management takeovers, which have long been considered to discipline CEOs and managers in the private sector,[32] acts as a deterrent to managerial slack;

Fourth, the threat of bankruptcy, the formalization of the relationship between governments and SOEs, and the imposition of a "harder budget constraint," achieved through the states unwillingness to provide loans, play a major role in deterring managerial slacks in privatized SOEs;[33] and

Last, privatization is irreversible, thus conveying credibility to the government policy unlike other reform policies.[34]

Based on these criteria, it is easy to see why the Korean governments privatization plan faces numerous difficulties. Because of its partial and cash-flow rights approach in privatizing SOEs, it has failed to provide enough external incentive to SOE managers to change their behavior. The government retained control rights in most state monopolies and only sold minority interest to the private sector, and hence making the threat of bankruptcy and corporate takeovers by third parties redundant. Also, the effectiveness of the private sector monitoring was hindered by unique Korean commercial laws that protect majority shareholders interest by sacrificing minority shareholders rights to convene shareholders meetings and represent themselves on boards of directors. Last, inconsistent privatization policies conferred little credibility to the governments SOE sector reform programs. The government delayed privatization schemes several times and voided many of state monopoly restructuring plans. This has made the benefits of privatization, specifically points 1 and 5 redundant.

The disappointment about the past Korean SOE sector reform measures is reported in Kim (1996). I find that the MPES, instituted in 1983, was largely ineffective at changing the relationship between the state and the SOEs in question. This is because it left windows of opportunities for the state to intervene in the SOE sector operation. Although in theory the government ministries were contractually obligated to leave the management of SOEs to professional managers, ad-hoc intervention in major policy variables existed. Partial cash-flow rights privatization also failed to depoliticize the process, and government control over major policy variables including pricing and investment decisions continued in my analysis of POSCO and KEPCO. We argue in the next section that economic efficiency goals of privatization schemes were compromised due to conflicts in its privatization goals and institutional constraints which the government was unable or unwilling to overcome.

2. Institutional Analysis

Delays in the privatization of SOEs in Korea has been contributed to the sluggish stock market, which made it difficult to sell SOE shares, and the economic concentration surrounding the diversification of chaebols, which forced the government to come up with appropriate industrial structures for state natural monopolies prior to divestitures (Song (1993)).[35] Although these may be real technical and implementation issues the state needs to resolve, there are institutional factors that forced the government to take soft reform measures aimed at protecting various political constituents. We argue that because of SOEs reasonable political performance[36] and the states fear of losing leverage in strategic industries, including electricity supply and telecommunications industries, the government employed a gradual and partial reform approach.

The bureaucratic internalities (Wolf (1988)) which sought to preserve the current supply level of government intervention played an important role in determining the current state of the SOE sector and its present reform policy. Traditionally, various economic ministries intervened in the operation of SOEs through so called policy guidelines and policy consultation (Choi (1993)). SOEs major policy variables, such as prices, quantities, and investment plans, were coordinated with supervising ministries. This coordination process provides important micro and macroeconomic management tools for the state in which it was unwilling to yield to the private sector without an struggle. Because SOEs traditionally provided various useful perquisites for ministries, including jobs for retiring ministry officials and budget for clandestine activities[37], the transfer of control rights of SOEs to the private sector was treated as a major threat to various economic ministries. Privatization policies drawn by the Economic Planning Board were often overturned by relevant ministries for these reasons. We argue that this necessitates the establishment of an independent commission in charge of drawing up privatization policies rather than entrusting economic ministries to come up with their own privatization policies.

In addition to the bureaucratic resistance within relevant ministries, the governments inability to persuade labor unions and senior management to support its reform programs also dealt a blow to its policy course. Opportunistic behavior of the state, demonstrated by inconsistent and soft reform policies, and the threat to their job security under the private ownership led SOE employees to oppose more radical version of privatization policy. Also, the possibilities of the expropriation of managerial and physical investments meant that SOE managers had little incentive to invest in cost-reducing activities under any form of government ownership during the transition process. The states lack of privatization initiatives, evidenced by the government unwillingness to find the full extent of the economic efficiency in the SOE sector, as mentioned in section 2, and its unwillingness to transfer control rights of many SOEs, especially those in state monopolies, made it difficult to harden the soft budget constraints[38].

We also argue that the government has utilized the argument for the need to restructure state monopolies, especially those with natural monopoly characteristics (so called network problems), to delay the privatization process. It used the argument put forth by British economists (Bishop, Kay and Mayer (1993 and 1995)) that regulatory failures increase when governments fail to initiate industry restructuring prior to privatization--that economic regulation has to be strengthened and regulators were further complicated by the task of trying to compensate for the deficiencies of inappropriately structured private sectors to delay the process. Fearing that sales of SOEs to chaebols without appropriately amending the industrial structures prior to privatization may lead to public criticism of its policies, the state decided to resort to a second best solution of relying on partial and gradual reform approach.

Lopez-de-Silanes empirical evidence (1994), however, suggests that restructuring should be left to the private sector as the government, the one who has caused SOEs to run into financial difficulties through political intervention, is ill equipped to handle the restructuring and may cause further government and regulatory failures if they are mandated to do so. Although privatization of state monopolies do pose implementation difficulties, other forms of economic regulation of privatized monopolies have been cited as being successful. The British example of RPI-X type of regulation[39)], placing privatized monopolies under autonomous industry regulatory agencies with an incentive to reduce costs, have succeeded in eliminating inefficiencies caused by the state ownership (Foster (1993) and Newbery (1995)). Although there is a distinct possibility of pyramiding of regulation (Choi (1995)) in Korea once state monopolies are privatized and placed under some form of autonomous commission type of regulation or under direct ministerial regulation, this may be solved through placing the government under contractual obligation limiting its intervention. This also necessitates the need to come up with core investor groups to whom the government transfers its controlling interest of SOEs. These core investors would be more effective at protecting their control rights to privatized SOEs than small investors, created through broad-based ownership schemes (Song (1991)) which the state has conveniently utilized in the partial privatization of POSCO and KEPCO.

Although the extent of these market failures, economic concentration and restructuring issues, is problematic and has been accepted as socially undesirables, the continuation of the state ownership and intervention in the production of goods and services, and therefore taking on government failures may outweigh the economic cost under the regulated private ownership. The analytical framework under which the government should formulate privatization policy should be one in which it compares the relative size of possible market failure and regulatory failure resulting from the private ownership versus government failures arising from the direct government operation of SOEs. It seems, however, that the government considers the private and public production as among equals.

This in turn translates into the governments mistrust of the working of the private sector and the market mechanism (Choi (1995)). As explained above, in explaining the partial and non-committal privatization approach taken with respect to the sales of state monopolies, the government often cited the severe economic concentration issue arising from the expansion of chaebols economic activities. It reasons, therefore, that the state should come up with appropriate industry structure prior to the sale of these state monopolies. However, behind this line of thinking, the government is not considering, or conveniently ignoring, the need to analyze the magnitude of market failures under the private ownership in comparisons to government failures arising from retaining SOEs under its control. This should provide a real guideline as to whether the public sector should continue to provide good and services.

These factors have resulted in inconsistent privatization and deregulatory policies which have been consistently undershooting its policy targets over the years. This is evidenced by the past government failures in both reforming and privatizing SOEs and other relevant agencies. Under the President Chuns regime, although they came up with the MPES[40] as a new way of evaluating SOE performance, other privatization plans were postponed indefinitely. President Roh also announced plans to privatize state properties but other than the sales of minority interest in POSCO and KEPCO through a broad-based ownership scheme, more radical approach were eventually undermined by powerful interest groups that included supervising ministries and labor unions. Under the current regime, aggressive privatization plans achieved little results, particularly over the rationalization and privatization of state monopolies. Instead, it permitted the diversification of state monopolies activities in areas that do not require the state participation, including POSCO and KEPCOs entry into telecommunications. Under the current economic climate, it does not make sense for state monopolies to diversify their activities into competitive markets with little or no market failures. This is because since these markets are competitive in nature, the entry by SOEs are unlikely to generate greater competition but rather causes further misallocation of state resources.

We also argue that government policies that are unstable and unpredictable cause further problems for the private sector in adopting to the new environment (Kim Hyoung Pyon (1994)). This is because such unstable policies not only confer little credibility to government policies but also fail to realign the expectations of players involved, especially SOE sector labor unions and other interested parties that are likely to benefit from the status quo.

In the next section, we examine to see if the assertion made by Shleifer and Vishny (1994) and Lopez-de-Silanes (1994) that governments in transitional and well developed economies need to send a clear and consistent signal of their intent to end the "soft-budget constraint" is a required component in all privatization or SOE reform measures.[41] This requires the clear identification of changes in government control mechanisms and the analysis of their impact on managerial accountability and incentives in SOEs. The analysis is conducted first by examining the incentive and ownership view and then reviewing the control rights and cash-flow rights view.

IV. The Fundamental Theories of Privatization

Only recently has the theoretical advance been made to analyze the specific trade-off between the working of SOEs and private enterprises. Although the conventional expropriation of SOE funds and investment. This necessitates residual rights considerations under the incomplete contract setting.

2. Control Rights and Cash Flow Rights

Grossman and Hart (1986) have asserted that separating cash-flow rights and control rights has provided important insights on how privatization policies should be structured. Assuming that the relationship between politicians and managers is governed by incomplete contracts, the residual rights to control rather than managerial incentive contracts are critical determinants of resource allocation (Shleifer and Vishny (1994)). It gave birth to a view that who retain, among politicians and managers, and treasury, the cash-flows rights and control rights determines the characteristics of firm in question, and Shleifer and Vishny (1994) summarize the implication on economic interpretation in <Figure 2>.

In their model which portrays the game between politicians and managers, they assume that either party can retain control rights over policy instrument variables, such as the control over excess employment (L), while allocation of cash-flow rights also can go either way in separation from control rights. For instance, in conventional SOEs, the cash flow is controlled by the treasury, and the politician controls L, while in the private firm, the manager has both control and cash flow rights. In between, two intermediate forms of institutions are possible: (1) a corporatized SOE or privatized management firm in which the politician controls over L and the manager controls cash flow; and (2) a regulated private firm in which the exact reverse of the former case holds.

To illustrate the effect of the real transfer of specific rights, we use the Shleifer and Vishnys model (1994), which specifies four main players: managers, private owners, politicians, and the treasury. In the game between the manager and the politician, the

<Fig. 2> Interaction between Control and Cash-flow Rights

		Cash-flow Rights	
		Private	Government
Control Rights	Private	Private Company	Corporatized SOE or Privatized Management
	Government	Regulated Private	Full SOE

Source: Lopez-de-Silanes (1994)

latter is assumed to be malevolent because his prime objective is to increase employment beyond what is optimal. The politician influences the manager through subsidies, t, made available from the treasury to the firm. Since the treasury and the manager jointly own cash flows, the treasury only cares about subsidies minus the managers contribution. Hence, we get the following:

$$T=t-(1-\alpha)(t-wL)=\alpha t+(1-\alpha)wL \qquad [2.3]$$

In the model, since the treasury owns (1-α) fraction of shares, it gets back a fraction (1-α) of the transfer, t, as a shareholder, but must pay a fraction (1-α) of the excess wage bill (wL) in terms of forgone profits. T stands for net subsidies from the treasury.

On the other hand, the politicians objective function is such that

$$U_p=B(L)-C(T)+b \qquad [2.4]$$

where B(L) denotes the benefits of increasing employment beyond what is optimal, C(T) the political cost of giving subsidies, and b the cost of bribes. The managers objective function is described as follows:

$$U_m=\alpha(\pi+t-wL)-b=\alpha\pi+T-wL-b \qquad [2.5]$$

where managers, as the residual claimant, receives his own share of profits minus the excess wage bill and subsidies. Note that in illustrating the model, we assume b=0 that politicians and manager cannot exchange bribes to enhance their own allocation sets. Also, note that we assumed that the government or the treasury plays a passive role in the game according to the property right perceptive.

From these, we find the threat points for the two control structures from which the manager and the politician can bargain to a different allocation. Accordingly, when the politician has control rights over both T and L, he chooses L and T to maximize his utility function:

$$B(L)-C(T) \qquad [2.6]$$

subject to the constraint that the manager receives his reservation utility:

$$U_m\geq 0. \qquad [2.7]$$

The resulting first order condition (FOCI) is that:

$$T = wL - \alpha \pi b, \text{ and} \tag{2.8}$$

$$B'(L) = wC'(T) \tag{2.9}$$

These outcomes imply that in a politician-controlled firm, profit is driven down to zero because extra labor is hired until the marginal political benefits of the extra employment equals the marginal political cost of subsidies from the treasury.

When the manager is in control of L, they claim that the threat point is determined through Nash equilibrium in which both parties non-cooperatively choose L and T, respectively. This results in $L=T=0$. Computing the joint efficient outcome, however, they maximize the combined utility functions of the manager and the politician:

$$B(L) - C(T) + \alpha \pi + T - wL. \tag{2.10}$$

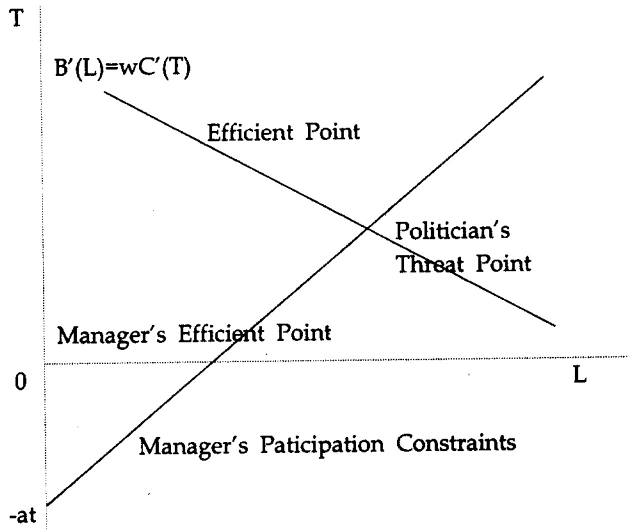
The FOCs are as follows:

$$B'(L) = w, \quad \text{and} \tag{2.11}$$

$$C'(T) = 1. \tag{2.12}$$

This implies that both parties together raise employment levels to a point where the marginal political benefits of an extra person to the politician is equal to his wage. In return, they extract subsidies from the treasury until the marginal cost of doing so is exactly one dollar. Shleifer and Vishny assert that at that point, the marginal political benefits of an extra employee is exactly offset by the marginal cost of subsidies to pay for his wage.

From these, they infer that the privatization of control rights will lead to a lower L and a higher T. This is because under politician control, the managers equilibrium lies on his indifference curve because his utility is driven to zero by the politician, illustrated in <Fig. 2-2>, while under manager control, his utility is at least and hence the equilibrium lies above that with the intercept of zero. This implies that under manager control, the firm must have a lower L and a higher T than that under politician control. They also argue that the reduction in L implies some restructuring efforts by the manager.



〈**Fig. 2-2**〉 Threat Points and Joint Efficient Points

More relevant to our purpose is the impact of the cash flow rights privatization. Shleifer and Vishny separate such an attempt under the respective control setting. Under politician control, the sales of cash flow rights (α) leads to an increase in L and a cut in T, while under manager control, the allocation result is independent of α. This illustrated in <Fig. 2-2>: a downward shift in the managers participation constraint is equivalent to an increase in α, and hence results in a rise in L and a reduction in T. When transferring cash-flow rights to the managers from the Treasury this is what happens because costs of subsidizing excess employment are shared with the manager.

In summary, these results suggest that when the government maintains control over firms, privatizing cash flows simply enable politicians to extract more rent from the managers and does not require restructuring of enterprises. The transfer of control rights to the manager which essentially gives him more cash flow rights, however, does not create additional incentives to make fundamental changes to the SOEs. This is consistent with Blasis finding (1989 and 1994). This has an important implication on the Korean privatization experience because natural monopolies were subject to cash flow rights privatization in a piece-meal manner. It is also interesting to note that governments anti-corruption campaign against bureaucrats and politicians were aimed at raising C(T), which, according to Shleifer and Vishny, would lead to reductions in both L and T. To achieve hardened budget constraints, radical changes to monetary policy and some form of government commitments are required to make policies credible.

V. Conclusions

There are many governments around the world that still rely on conventional and piece-meal approaches to reforming SOE sectors (UN (1995)). After numerous failures to reform organizational structures, governments now are attempting to target their reform programs on the managerial (internal) incentives of SOE managers. These conventional reform policies attempt to harmonize managerial incentives with the objective function of owners. Underlying performance contracts and management performance evaluation systems, which are currently used in over twenty different countries (UN (1995)), is the belief that altering managerial incentives in SOEs can favorably change long-term SOE performance. These programs, which are often viewed as alternatives to more radical privatization approaches, however, rarely make fundamental changes to the external incentives that face managers and firms.[47)]

The transfer of the residual rights from the public to the private sector necessarily implies a change to the relationships among those players involved with the firm. In this paper, we utilized recent developments in privatization theories to cast light on the various key features of privatization policies used around the world: the incentive and ownership School and the cash flow and control rights privatization School. The implication of these two schools of thoughts are clearer in the context of the Korean SOE sector reform and privatization policies: **the performance results stemming from policies that restructures SOEs by altering managerial incentive arrangements without fundamentally changing the internal and external incentive structures will most likely be difficult to sustain in the long-run**. In addition, as Shleifer and Vishny (1994) claim, the privatization of control rights differs in effectiveness from cash-flow rights privatization because under the latter scheme, governments can still influence the working of privatized units through their control over the allocation of key resources in those firms. With respect to the privatization of control rights and cash-flow rights, what really matters, not surprisingly, is who controls the allocation of resources. This implies that **partial privatization, if it is not accompanied by real transfer of control rights to a core group of investors, may be limited in sustained effectiveness.**

The credibility of the government privatization policies can be further tainted by the cash flows rights privatization rather than control rights privatization. Although it is not explicitly laid out in their argument, whether control rights are given to core investor groups or to a wide-range of private shareholders matters if we consider the transactional aspects of acquisition of management information. The irreversibility of privatization also matters because full privatization can be seen as a credible commitment device of the government to harden the budget constraints.[48]

There is a need for a fundamental reform of the Korean SOE sector. The politicized and bureaucratized SOE sector has faced numerous charges of corruption and inefficient operation. The political appointees on the board level do not necessarily imply inefficiencies in SOEs but reflect the politicized process in their relationship with the state. Internal management reform programs and partial cash-flow rights privatization the Korean government is pursuing is unlikely to harden the relationship. Although recent measures aimed at introducing competition into the SOE sector has been welcomed, the government should now actively pursue the option of ending its ties with SOEs through control rights privatization.

Notes

1) See Bennett (1995), Caves (1990), and Vuylsteke (1988). According to Galal and Shirley (1994), over 7,000 SOEs have been privatized thus far. Of these, 2,000 are from developing nations since the early 1980s.
2) This includes liberalization measures to open up domestic markets to foreign competition, and also to reduce the economic distortions from actions. See Berg (1988) and Kahn (1988).
3) Refer to Jones and Sakong (1980), Kornai (1992), Lopez-de-Silanes (1995), and Nove (1980) for details on the role of state in economies. Stern et al. (1995) describes the industrial targeting process and polling of resources by the Korean government during the heavy and chemical industry promotion period.
4) See Donahue (1989), Kikeri et al. (1994), and Vernon and Aharoni (1981).
5) These include budget deficits and balance of payments deficits. Refer to Kikeri et al. (1992), Vernon (1988), Ramamurti (1991), and Vuylsteke (1988).
6) See Kikeri et al. (1992) and UN (1995).
7) Although ideological commitments were made to reduce government involvement, often forced by donor agencies including the World Bank, many of these reforms were chosen to achieve "economic efficiency." See Serven et al. (1994).
8) By conventional approach, we mean more gradual and piecemeal methods of changing internal and external incentives facing SOE managers. It also includes the use of performance contracting (evaluation schemes), partial privatization of SOEs or any other measures that do not transfer controlling interest of SOEs to the private sector.
9) Han alluded the idea of bringing in managers from the private sector and therefore reducing political appointments in these SOEs.
10) It may be that some serious studies have been done by the Korea Development Institute and other government think-tanks but the results have not been made widely available to the public.
11) Although private profit returns alone can not accurately measure the productivity of the SOE

sector in comparison to the private sector, as often the former is mandated to pursue non-profit maximization objectives, such as marginal cost pricing or labor maximization, since most SOEs in Korea are involved in some degree of monopolistic production of goods and services, private profit returns do provide a useful comparative measure.

12) The government sets a guideline for SOEs to comply in terms of annual labor cost growth.

13) This again originates from unnecessary government regulation (or guideline) that specifies the amount of R & D spending each SOE should incur in physical assets. Since each SOE has to spend up to a certain amount, the incentive is there to exploit it.

14) We only included subsidiaries of government-invested enterprises, a term used for SOEs with at least 50% government direct holding. For specifics on the Korean SOEs, refer to EPB (1988 and 1993) and Kim (1996).

15) Mail Economic Daily reported (Oct. 9, 1996) that to ease personnel bottleneck problems in parent companies, subsidiaries were used to take on excess number of senior managers from parent companies.

16) The ruling partys Secretary, Kang Sam Je, was quoted saying that the past regimes took rebates from government projects, including those generated by SOEs, ranging from 10 to 20 billion Won as a convention (Mail Economic Daily (October 23, 1996)).

17) This refers to the inability of parliamentary committee monitoring system.

18) Although it is outside the scope of this paper, we can infer the size of inefficiencies in the SOE sector by examining the performance improvements seen in the privatized SOEs in the past (Jones et al. (1993)), and therefore finding the differentials in performance in pre- and post-privatization. Also, the benchmark performance in relevant private industries provides useful information. Similarly, cross-country comparisons in relevant sectors provide more specific information in measuring the extent of inefficiencies in one countrys SOEs. These factors, especially state monopolies over procurement process, provide a rough estimate on how politicized the process is.

19) The use of a performance evaluation system is not limited to management information systems but also helps to formalize the relationship and to impose a "hard budget constraint." See Chapter IV for details on the working of the system.

20) These are internal reform measures aimed at improving the productivity of managers and workers, through the use of automation and information systems. Refer to Aharoni (1986), UN (1995), Ramamurti (1986 and 1987), Jones and Mason (1987), Trebat (1983), Escobar (1982), and Phatak (1971).

21) Refer to UN (1995), Jones (1989), Ramamurti (1987), Park (1987), Song (1989), and Trivedi (1992) for a discussion on schemes used to reform the relationship between government agencies and SOEs.

22) Goodman and Loveman (1991), Beesley and Littlechild (1986), Starr (1987), and Vickers and Yarrow (1988) all emphasize the importance of competition and regulation policies over ownership.

23) See Foster (1992), Jones and Sakong (1980), Mallon (1981), Vernon (1987), and Zeckhauser and Horn (1989), for a discussion on the realignment of the governments role in mixed economies.

24) See Vuylsteke (1988), Jones (1982 and 1989), and Vernon (1989).

25) The SOE sector, or more broadly, the public sector has traditionally played a more important role in jump-starting the economy since the 1960s. See Perkins and Roemer (1991) and Stern et al. (1995) for details on government involvement in the economic development.
26) See the report by the Presidential Commission on Economic Restructuring (1988).
27) The term Performance contracting system will be used interchangeably with the MPES.
28) See Appendix A for a breakdown of Korean SOEs.
29) Another important factor relates to dismal performance of SOEs over the years. Refer to Shaikh (1991) and Kikeri et al. (1992).
30) See Foster (1992).
31) Refer to Caves (1988), B楸 (1991), and Tirole and Laffont (1993) for a discussion on the role of capital markets to improve the monitoring of privatized firms. The superiority of stock market monitoring reflects the property rights theory, which argues that private ownership is more beneficial since the owners are held accountable for asset deployment.
32) See Bhagat, Shleifer and Vishny (1990). Although there is a large counter-literature on the topic, nevertheless, the public sector does not even have the benefit of the doubt on the effectiveness of markets for corporate control.
33) The imposition of a hard budget constraint can be achieved by limiting the availability of loans, cash and capital injections, and other forms of subsidies by the state. The transfer of ownership from state to private hands achieves that end.
34) Beesley and Littlechild (1986), Foster (1993), and Vickers and Yarrow (1991).
35) This is consistent with Landau (1992) who claimed that due to the nature of bureaucratic system, governments tend to hide their regulatory failures by creating and blaming on politically inspired scapegoats.
36) Performance as defined by bureaucrats and public differs from that defined by the business community.
37) For instance, POSCO was known to have provided political funds for the governing party when its chairman became a ranking member in the party. Also, SOEs are known to be providing various resources and sponsoring activities ministries ask for. It includes SOEs paying for ceremonial activities (for instance, resources for Independence Day) and other ministry sponsored activities such as picnics for ministries personnel.
38) Soft budget constraints (Kornai (1979)) refer to the extent to which managers perceive governments as soft lender, who do not allow SOEs to go bankrupt and they do not seriously consider ways to restructure their cost function.
39) Under this type of regulation, the utility rates increase by the amount of retail price index changes minus X factor, imposed by the state regulatory body to take account of the technical and productive efficiency improvements.
40) To deal with the shortcomings of public ownership in the early 1980's, the Korean government relied upon managerial performance evaluation systems. The system is a management control system geared towards formalizing the relationship between the government and SOEs. This is accomplished through periodic agreements on corporate performance between the government and selected SOEs, through which weighted financial and qualitative indicators are negotiated. In return, the government supposedly guarantees autonomy in three key managerial areas: procurement, personnel, and investment. The

performance targets are monitored and linked to a compensation ladder, based on the relative performance of all GIEs. Despite its innovative features and attempts to eliminate the governments various control mechanism, the system has been disappointing largely for one reason: the process requires a close working relationship between the regulator and the regulated, implicitly enabling the government to retain regulatory control. There are also concerns that the state may lack the technical competence to devise an effective evaluation scheme.

41) Refer to Kornai (1979).

42) See Pint (1993), B桝 (1991), and Vickers and Yarrow (1989) for recent survey of this literature.

43) Other authors including Foster (1993), Bös (1991), and Caves (1991) have suggested that there exist economic reasons to believe that b might be bigger than a. Economic reasons include the capital market monitoring, the markets for takeovers, and possibilities for bankruptcies.

44) Implicit in their assumption is that privatization provides an improved monitoring mechanism through the stock market participants because individual shareholders, fund managers, other institutional investors, brokers, and analysts have vested a interest to obtain precise information on future cash flow prospects of the company in question. Retiring shares from stock markets through nationalization tends to replace stock market monitoring with the government ministerial or political monitoring of SOEs, which many argue is unlike to do a proper job (Caves (1991) and Jones (1989)).

45) It is often politically and technically possible to design incentive arrangement that would encourage private sector behavior in SOEs. In the U.S., senior executives in federal corporations do have incentive based bonus schemes to firm performance (Washington Post (1995)).

46) However, the effectiveness of employee stock ownership plans (ESOP) has been debated (Blasi (1988)).

47) External incentives include competition and regulatory settings that face managers and firms in question.

48) This is because small shareholders not participating in the monitoring of managers and activities of boards of directors.

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