Issues of Privatizing Public Enterprise in the Telecommunications Sector in Korea*

KIM, DONG-KUN

Professor of Economics, Graduate School of Public Administration, Seoul National University

1. Introduction

There has been a change in attitudes toward public enterprises around the world in recent years. In Western Europe, the United Kingdom and France have set out to privatize public enterprises on a large scale. While many of developing countries have considered public enterprise as the mainstay of economic development, there has been also an increasing disillusionment with public enterprise and proposals have been made for privatization in various areas.

This paper attempts to describe the economic role of public enterprise and explain the general reasons for privatizing public enterprise in the developing countries. And this paper attempts to draw some issues involved in the privatization of public enterprise, particularly considering the case of telecommunications sector in Korea. Future prospects are briefly mentioned as conclusion.

2. The Economic Role of Public Enterprise (International Comparison)

Economic theory points out that public enterprise is an efficient response to a variety of pervasive market failures such as imperfect competition in both factor and product markets. On the other hand, public enterprises are intentionally created for the acquisition or consolidation of political and economic power. In addition, revenue considerations sometimes justify the establishment of a government monopoly. Here the existence of public enterprise is no longer the result of market failure. The existence of public enterprise often serves the cause of gov-

^{*}This is a paper presented at the International Conference of Korea Information Society Development Institute (KISDI), "Privatization & International Trade in Telecommunications", held in Seoul, Korea on October 12–13, 1989. Some minor corrections were made and any error is entirely the author's responsibility.

ernment failure as well as government inefficiency.

No matter how the public enterprise sector was created in Korea, its size is quite large. In 1980, the share of public enterprises to GDP in Korea was almost 10.0% and their share to domestic fixed capital formation was 27.6%. The relatively large share to domestic fixed capital formation by the Korean public enterprise sector implies that there is a still strong government commitment to centrally directed economic development.

Table 1 contains data on the relative shares of public enterprises in the manufacturing sector of the developing countries as well as the industrial countries. The share of public enterprises in the manufacturing sector of the industrial countries was the highest in Austria (23 percent), followed by Italy (19 percent), Portugal (12 percent), and France (11 percent). Among developing countries, the share of public enterprises exceeds 90 percent in Iraq and Syria and is in the 50–60 percent in Ethiopia and Burma. Socialist developing countries have the tendency for pubic enterprises to dominate the manufacturing sector. While India has been influenced by socialist idea, the share of public enterprises in its manufacturing sector (16 percent) is not much higher than in Korea (15 percent) and in Taiwan (12 percent).

3. General Reasons for Privatization

Various reasons have been put forward to explain changes in attitudes towards privatization. It has been suggested that ideology has played an important role, in particular in the Western countries. Also, budgetary considerations have often been cited as reasons for privatization. Finally, it has been noted that private enterprises tend to be more efficient than their public counterparts.

While the relevance of ideology cannot be denied in the case of Western Europe (for example the United Kingdom and France), objective factors have importantly entered decision—making in these cases. In many cases, expectations for increased efficiency and reduced bureaucratic interference have been given as reasons for privatization. It is also important to notice that privatization is carried out by socialist—oriented governments as well.

As to budgetary considerations, public enterprises in developing countries had an overall deficit average 5.4 percent of their gross domestic product. [R. P. Short, "The Role of Public Enterprise: An International Statistical Comparison," in Robert H. Floyd, Clive S. Gray and R. P. Short, eds. Public Enterprise in Mixed Economy, (Washington, D. C., International Monetary Fund, 1984), pp. 110–196.] This result reflects the fact that the small current account surpluses of these enterprises, averaging 0.6 percent of GDP before depreciation and government transfer, financed only a fraction of their investments that accounted for the deficit on the capital account of public enterprises equal to 6.0 percent of GDP, on the average.

Table 1. Relative Shares of Public Enterprises in the Manufacturing Sector

		Year	Relative Share (Percent)
		1 Cai	(reitent)
INDUSTRIAL COUNT			
Australia	GDP	197879	4.0
Austria	GDP	1970–75	23.0 ^a
Belgium	GDI	1978–79	0.4
France	GDI	1971	11.42
Greece	GDP	1979	1.3
Ireland	GDI	197 4–7 7	9.4
Italy	GDI	1978	18.6°
Portugal	GDP	1976	12.0
United Kindom	GDI	1978–81	5.3
SUB-SAHARAN AFRI	CA		
Ethiopia	GDP	1979 -8 0	60.9
Ghana	GDP	1970	32.9
Ivory Coast	GDP -	1979	25.2ª
Kenya	GDP	1970-73	13.1
Senegal	GDP	1974	19.0
Sierra Leone	GDP	1979	14.2
Tanzania	GDP	1974-77	37.9
NORTH AFRICA ANI	O MIDDLE EA	ST	
Egypt	GDI	1979	80.4ª
Iraq	GDI	1975	96.7
Morocco	GDI	197 4 –76	26.2
Syria	GDI	1974-70	95.9
Tunisia	GDP	1982	31.4
	GDP	1979	30.1
Turkey	GDF	1975–76	
Yemen Arab Rep.	GDI	19/5-/0	59.5
ASIA			
Bangladesh	GDP	1981-82	46.1
Burma	GDP	1980	56.2
India	GDP	1978	15.7
Korea	GDP	1977	14.9
Nepal	GDP	197475	4.4
Pakistan	GDP	1974–75	7.8
Singapore	GDP	1972	14.2
Sri Lanka	GDP	1974	33.2
Taiwan	GDP	1985	12.0
Thailand	GDP	1970-73	5.2
LATIN AMERICA			
Bolivia	GDP	1973–75	5.9
Venezuela	GDP	1985	16.2

Source: R. P. Short, "The Role of Public Enterprise: An International Statistical Comparison," in Robert H. Floyd, C. S. Gray and R. P. Short, eds, Public Enterprise in Mixed Economy (Washington, D. C., International Monetary Fund, 1984)

Note: aincluding mining.

As far as financial performance is concerned, Korean public enterprises are no exception. During 1982, the rate of return to total asset of 25 major government--invested enterprises was 7.8 percent, which is less than one third of the average rate of return to total asset for all industries, private and public. The ratio of operating profit to business capital of those 25 government-invested enterprises was 3.7 percent, while that of all industries (private and public) was 10.1 percent, while that of all industries (private and public) was 10.1 percent. The number of deficit public enterprises was increased up to 1983, but thanks to the new Korean public enterprise policy introduced in 1984, [The major contents of the new policy of 1984 were: provision of managerial autonomy through the reduction of government control, restructure of the board of executive directors, implementation of performance-evaluation system, and enlargement of incentive system linked with performance results.] the number of deficit enterprises and its size have been substantially reduced since 1984. There are few enterprises now which are making deficits. However, this financial performance is related only to the current budget and, if the capital budget would be considered, many of Korean public enterprises would still create a large amount of deficits.

A variety of factors account for the apparent poor performance of public enterprises in the developing countries. A comparative study lists; (i) inadequate planning and poor feasibility studies resulting in ill-conceived investments; (ii) lack of skilled managers and administrators; (iii) centralized decision making; (iv) government intervention in the day-to-day operation of the enterprise; (v) unclear multiple objectives; and (vi) political patronage. [A. M. Choksi, "State Intervention in the Industrialization of Developing Countries: Selected Issues," World Bank Staff Working Paper No. 341 (Washington, D. C., July 1979)] One may add overmanning, the payment of excessively high wages, slowness in decision-making, and the lack of the threat of bankruptcy. All these factors are related to two basic conditions; the absence of clear-cut objectives for managers and the government intervention in enterprise's decision making. [Bela Balassa, "Public Enterprise in Developing Countries: Issues of Privatization," a paper presented at the International Institute of Public Finance held in Paris, August 24–28, 1987.]

Budgetary considerations with other unfavorable factors together have thus contributed to the change in attitudes towards privatization. But, privatization will not reduce the financial burden that public enterprises represent, unless their performance can be improved. Even though efficiency comparisons are not easy unless public and private enterprises carry out the identical economic activity, evidence on the relative inefficiency of public enterprises in the developing countries has accumulated over time except a few areas. It has made government recognize the cost of public enterprises to the budget and to the national economy.

4. Some Issues of Privatization

Table 2 provides information on planned sales of public enterprises to private interests. It represents that limited progress has been made so far in implementing privatization program in the developing countries. The opposition of vested interests, the poor financial situation of the enterprises to be privatized, the political obstacles to their rationalization and the limited availability of private capital, have all contributed to the delays that have been encountered.

As to privatization, it should be emphasized that selling some of the shares of a public enterprise while retaining control in the public sector does not constitute privatization. Rather, such sales reduce the availability of finance for the private sector, thereby contributing to "crowding-out." Privatization should be defined as involving the transfer of control.

At the same time, one would have to create the appropriate conditions for privatization. This would necessitate, first of all, establishing clear and unambiguous procedural rules and applying these rules in practice. The rules should provide for the valuation of the enterprise to the privatized by an independent body, which may use auctioning or other methods appropriate for the conditions of the country concerned. This will permit to avoid either underpricing or putting an unreasonable value on assets of questionable productivity.

On the other hand, combining privatization with democratization may bring fruit, i.e., improved income redistribution. Furthermore, privatization may be used to revitalize the stock market. For example, it is the intention of Korean policy makers to use privatization as a means to strengthen the stock market. And, the revenue secured by the sale of the enterprise stock are said to be used to finance the welfare programs in Korea. Income redistribution will be improved by selling state—owned farms to peasants and/or by selling public utility companies to low—income families.

It may also be desirable for the government to undertake rationalization of the enterprise prior to privatization, so as to eliminate its excessive debt and to reduce overmanning. At the same time, there is further need to establish and strengthen competition in order to derive the benefits of privatization. Without competition, profit maximization by the newly–established private enterprises may not serve the national interest.

For similar reasons, in the absence of privatization, establishing competitive conditions for public enterprises would lead to improvements in efficiency. [Of course, efficiency sometimes may conceivably be deteriorated rather than improved as a result of competition.] Some socialistic policy makers (say, Hungary) may be interested in such direction. But this can be successfully done only if the management of public enterprise is made independent of the government and it is given appropriate incentives to maximize profits.

Table 2. Planned Sales of Public Enteprrises in the Developing Countries (as of 1987)

Region/Country	Total Number of Public Enterprises	Targeted Sales
AFRICA		
Cameroon	80	12 (-)
Guinea	65	43 (-)
Ivory Coast	113	20 (4)
Kenya	180	20 (-)
Liberia	23	7 (-)
Madagascar	130	15 (-)
Mali	54	24 (2)
Mauritania	108	10 (1)
Niger	54	24 (-)
Senegal	104	10 (5)
Slerra Leone	26	10 (-)
Sudan	136	n.a. (7)
Togo	73	40 (-)
Uganda	130	67 (-)
Zaire	138	37 (11)
LATIN AMERICA		
Argentina	100	27 (-)
Brazil	547	155 (17)
Chile	27	23 (-)
Costa Rica	39	14 (1)
Honduras	81	66 (12)
Jamaica	320	41 (6)
Mexico	845	236 (33)
Panama	45	5 (1)
Peru	142	60–70 (3)
ASIA		
Bangladesh	778	n.a. (217)
India	217	29 (-)
Malaysia	150	- (4)
Pakistan	112	– (6)
Philippines	86	- (1)
Singapore	n.a.	41 (-)
Sri Lanka	43	- (11)
Thailand	70	- (3)
Turkey	65	10 (2)
Korca	105	10 (-)

Source: R. Hemming and A. M. Mansoor, "Priavtization and Public Enterprises," IMF Working Paper No. WP/87/9 (Washington, D. C., International Monetary Fund, February 25, 1987); and Economic Planning Board (Korea) data files.

Note: The number in parenthesis indicates actual sales.

The question remains, however, if one can establish truly competitive conditions for public enterprises while maintaining public ownership. This is an important question to be debated. While there are some examples of highly efficient public enterprises in some developing countries, e.g. in Korea and Brazil, a knowledgeable observer of other developing countries has expressed skepticism as to the prospects for industrial development via public enterprise. [Tony Killick, "The Role of the Public Sector in the Industrialization of African Developing Countries," *Industry and Development*, No. 7 (New York: United Nations, 1983). pp. 57–88.]

Finally, consideration may be given to leasing or management contracts as alternatives to privatization, with the contracts awarded through auctions. It may be intensively used in those countries where ideological considerations limit the sale of public assets.

5. The Development of Privatization in the Telecommunication Sector

The proper scope of privatization is a matter which therefore requires careful analysis, because it must be acknowledged that there is a wide range of economic activities which will, for the far distant future, remain in the hands of the government. The objective of privatization should be to relieve market failure in ways which escape or minimize government (regulatory) failure.

The clearly recongized area for privatization is area in which markets are already working perfectly well, or would do so if they were allowed to—where the public enterprise is directly competitive with unregulated private enterprise or where this structure could easily be created. The government has no advantage in running banks or general manufacturing firms. Moreover, privatization may enjoy its successful results in areas where firms are engaged in international competition.

The more difficult areas arise where markets do not work perfectly, but where the market failure is a relatively trivial one or even the market failure is by no means trivial. The telecommunications industry may be falling into this category. In this case, there is a conflict between an underlying market failure and the inevitable weakness of any regulatory intervention designed to tackle it. The answer in this case is, whenever possible, to find mechanism for making markets work.

There are arguments for extending the public provision of basic utilities beyond the areas where that might be strictly economically justified. For example, in the debates on the privatization of the British Telecom (BT) in 1983, the issue of most apparent concern to conservative backbenchers was the continued provision of public telephone service in rural areas. But private enterprise sometimes will see that their services in rural areas are social obligations to them. Therefore, even

though there are some minor non-commercial aspects such as rural services in telecommunications, market solutions can in practice work well because that is fundamentally a commercial business.

Where telecommunications monopoly is unavoidable, however, competitive conditions for monopoly must be established. It would be difficult to maintain those conditions, as already mentioned. The need to give artificial support to emergent competition is strongly recognized. It may be desirable to split the areas of the telecommunications business. If it does not happen, the technical and financial advantages enjoyed by the monopoly operator would lead vertical integration of telecommunications.

An exclusive franchise for a period of years may give some of the incentives of a competitive solution while retaining the technical advantages of public enterprise monopoly. Such solution may be used in the local distribution networks for telecommunications as well as gas, electricity and water. To make competition for franchise real, there must be credible alternative suppliers and this can be most effectively accomplished by creating a number of regional operators.

There is no doubt that the telecommunications sector should be liberalized. Then, how fast should the telecommunications sector be liberalized? This issue probably is the most sensitive one in the recent discussions on privatizing the Korean Telecommunications Authority (KTA).

The UK experience may reflect some aspects to be considered. [J. A. Kay, C. P. Mayer and D. A. Thompson, Privatization and Regulation—the UK Experience (Oxford University Press, 1986); K. Newman, The Selling of British Telecom (London: Holt Reinhadt Winston, 1986).] The UK legislation of 1983 Act approved the sale of 51% of the shares of the British Telecom (BT). The BT issue was successfully flotated and about 2.25 million shareholders received allotments. The legislation which provided for the privatization of BT also established a regulatory authority—The Office of Telecommunications. This office has two principal duties; the promotion of competition and the regulation of prices. While the Office of Telecommunications vigorously pursued competition, its first duty was circumscribed by a variety of assurances given both to BT and new entrants; that is, mainstream telecommunications business is permitted only to BT and the BT's primary competitor, Mercury and further entry into the mainstream business (beyond BT and Mercury) is excluded till the end of the decade. Thus duopolies have been established for most value added network services.

Telecommunications industry is nowhere in the world a market with unrestricted competition. In many countries, telecommunications industry is still a highly regulated industry with various degrees of competition in its different segments. Even in countries which, with privatization, have opened up all parts of the market to competition, the area and degree of regulation seem to have increased rather than decreased. For example, the Federal Republic of Germany is

planning to set up a new policy which is moving towards opening up of the market to competition, but not towards deregulation in telecommunications. [Karl-Heinz Neumann, "The Changing Structure of Telecommunications in the Federal Republic of Germany," a paper presented at an international seminar of KISDI (June 13, 1989).]

Therefore, while the economic theory suggests that competition and deregulation would improve efficiency and welfare, a radical change in the direction of competition in the telecommunications sector cannot be advised. A gradual transaction towards competition in telecommunications is more desirable. While the most innovative and dynamic parts of the telecommunications should be opened to competition, the public enterprise monopoly (or duopoly) may be remained on the more basic and traditional service areas. But, there should be a re-examination of this monopoly from time to time. In this context, the privatization of the telecommunications sector in Korea should be proceeded, with clear procedural rule and timetable, by taking the gradual approach rather than the radical approach.

6. Conclusion

The Korean economy is now going through a transitional period, and public enterprise cannot be immune to these changes. It is for this reason that an in-depth review and appropriate reforms of the public enterprise sector are now imperative. This is an urgent task because public enterprises face growing competition not only from domestic firms but also from overseas producers.

The Korean government has tried to reshuffle the government organization aimed at eliminating budgetary waste. A key factor in controlling the budget will be to draw the line between the public and private sectors. Efforts should be made to encourage private entrepreneurs to exercise their creativity by revitalizing the function of markets. By the same token, the public enterprises must adopt a more autonomous and responsible management system and, wherever possible, its privatization should be seriously considered. Privatizing (and liberalizing) the telecommunications sector in Korea is an important task which must be carried out successfully, but its approach would be better to take the gradual change rather than the radical one.

References

Balassa, Bela, "Public Enterprise in Developing Countries: Issue of Privatization", a paper presented at the 43rd congress of the International Institute of Pt blic Finance held in Paris on August 24–28, 1987.

Choksi, A. M., "State Intervention in the Industrialization of Developing Countries: Selected Issues," World Bank Staff Working Paper No. 341 (Washington, D. C., July 1979).

- Hemming, R. and A. M. Mansoor, "Privatization and Public Enterprises," IMF Working Paper No. WP/87/9 (Washington, D. C., February 1987)
- Kay, J.A., C. P. Mayer and D. A. Thompson, Privatization and Regulation—the UK Experience (Oxford University Press, 1986)
- Killick, Tony, "The Role of the Public Sector in the Industrialization of African Developing Countries," *Industry and Development*, No. 7 (New York: United Nations, 1983), PP. 57–58.
- Kim, Dong-Kun, "Social Overhead Investment and the Role of Public Enterprise in Korea," a paper presented at International Forum on Industrialization and Trade Promotion, Korea Development Institute, Seoul, Korea, May 15–24, 1984.
- Newmann, Karl-Heinz, "The Changing Structure of Telecommunications in the Federal Republic of Germany," a paper presented at an international seminar of Korea Information Society Development Institute, Seoul, Korea, June 13, 1989.
- Newmann, K. The Selling of British Telecom (London: Holt Reinhadt Winston, 1986).
- Short, R. P. "The Role of Public Enterprise: An International Statistical Comparison," in Robert H. Floyd, C. S. Gray and R. P. short, eds. *Public Enterprise in Mixed Economy* (Washington, D. C., International Monetary Fund, 1984).
- Song, Dae-Hee, "New Korean Public Enterprise Policy and Efficiency Improvement," KDI working paper No. 8811 (Seoul: Korea Development Institute, September 1988).