PUBLIC ENTERPRISES IN KOREA: WITH SPECIAL REFERENCE TO THEIR ROLES IN ECONOMIC DEVELOPMENT

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Submitted to the

University of London

for the degree of

Master of Philosophy. *April 1991.*

ABSTRACT

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This study attempts to examine the role played by the public enterprise sector in Korea's economic development since the early 1960s, on which relatively little research has been directed. It is based on a belief that Korea's economic experience, particularly that of the 1960s and 1970s cannot be explained without acknowledging the government's strong initiative in the economy.

The study discusses the rationale of public intervention in general, followed by a consideration of Korea's turbulent modern history, through which the dominant role of the public sector has emerged. It notes some strong socio-cultural aspects, such as racial homogeneity and the influence of neo-Confucianism as factors behind Korea's pattern of economic development.

The study examines economic policy-making under the Park Government (1961-79) during which national planning and public enterprises were intensively utilized. A central part of the study consists of an examination of the role played by public enterprises during the country's rapid growth period of the 1960s and 1970s. The study found that public enterprises, as providers of infrastructure and pioneers in technology-intensive fields, provided the industrial base and inputs for the manufacturing sector. The study also found that the public financial sector gave the government a powerful means of control over the private sector.

The study also examines the unprecedented reform in the direction of Government-Invested Enterprises, the core group of the public enterprise sector, introduced as part of the economic liberalization measures in 1984. The study concludes that although there are some undesirable side-effects such as excessive competition and technical loopholes in the evaluation system, the overall reform deserves a positive interim assessment.

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ABBREVIATIONS

BAI	Board of Audit and Inspection
CEO	Chief Executive Officer
EPB	Economic Planning Board
FFYP	First Five-Year Economic Development Plan
GDP	Gross Domestic Product
GIE	Government-Invested Enterprise
GNP	Gross National Product
HCI	Heavy and Chemical Industry
KDB	Korea Development Bank
KDI	Korea Development Institute
KTA	Korea Telecommunications Authority
LDC	Less Developed Country
MEC	Management Evaluation Council
MOF	Ministry of Finance
NIC	Newly Industrialized Country
NEDO	National Economic Development Office, U.K.
ODC	Oriental Development Company
PE	Public Enterprise
POSCO	Pohang Iron and Steel Company

CHAPTER I

INTRODUCTION

One of the most distinctive features of the post-War era has been the growth in importance of public enterprises (PEs) in the structure of the national economy. It is clear that PEs are growing in size and in the scope of their activities. In the early days it was usual to find PEs in the public utilities and in the basic infrastructure of the economy. But today we can find them in virtually every field of economic activity quite independent of the country's position in the ideological spectrum.[1] They have been the main sources of growth in many countries, particularly those newly independent and in which a robust private sector did not exist.

In many countries, colonialism itself was highly interventionist and laid the foundation for the PE sector. It was thus a simple step further for the newly independent government to extend the realm of the state to various industrial sectors both through the acquisition of previously colonialist-owned concerns and through investments in the newly created PEs. More importantly, far from being *laissez-faire*, people viewed the government as the most important agent of change and economic development.[2]

In developing countries,[3] it is the PE which has to lay the basis upon which the structure of a dynamic and diversified economy is to arise by providing social infrastructures such as power, transport, irrigation facilities, etc. In the words of Hanson, 'Whatever the ultimate perspective may be, the country anxious to develop economically has no alternative but to use PE on a considerable scale, at the very least in order to get things going.'[4]

Besides, PEs are often expected to pursue certain social objectives as diverse as redistributing income, subsidizing particular regions of a country, and creating or maintaining employment. By and large, PEs have made a positive contribution to the process of creating and developing basic infrastructure, lumpy industrial projects and human capital. Unfortunately, however, the economic growth and fulfilment of social objectives are in many cases not achieved in a cost-effective way. Governments of different political persuasions around the world are increasingly dissatisfied with their performance. Much of the dissatisfaction derives from the observation that PEs have shown limited dynamism in responding to market challenges. Too often, PEs have accumulated financial losses or achieved modest rates of return on invested capital. Equally alarming, the unsatisfactory financial performance has often been transmitted to the rest of the economy.[5]

There are two possible sets of explanations for this dissatisfaction which clearly overlap. The first consists of country-specific characteristics and accounts for differences in performance of PEs from country to country. These characteristics include cultural, social, political, macroeconomic, and institutional factors. The second set includes factors that are specific to particular companies and accounts for variations in performance of PEs within a country. The study, however, directs to the first explanation.

The poor records of many PEs have prompted greater public awareness of PE management on the one hand and campaigns for privatization on the other. Firstly, there is an increasing realization that the nature of the problems faced in PE management tend to be different from those facing the private sector. Indeed, it would be over-simplistic to assume that systems of management which have been developed and practised by private enterprises can automatically be transposed to the area of PE management. However, one of the areas of PE study which so far have been paid insufficient attention is their environment. The environment is the social context in which PEs are embedded, the surrounding factors and forces that affect PE operations, and consists of a number of different dimensions - e.g. political, economic, cultural, etc. The environment factor is more important in developing countries, where the persistent tendency of government to use PEs as conduits for giving political patronage has been a major cause of losses and of inefficiency.

Secondly, privatization has recently become a common feature in PE reform programmes in developing countries, for a number of reasons. One is the upsurge in interest in privatization in the developed countries, most notably in Britain. A second reason is a sense that the state sector has become too large and that privatization can reduce the management burden of PEs on the government. A third reason is the hope that privatization will lead to more innovative management which will generally use resources more efficiently. Yet, despite this widespread interest, substantial sales of assets or equity in PEs have occurred in only a few developing countries so far (notably Chile and Bangladesh). Moreover, the enterprises privatized have usually been small in terms of assets or employment.[6] The problems of privatization have proved fairly formidable. For PEs that operated at a loss, the government has found it hard to interest buyers; for those operating at a profit, it has been difficult to persuade managers and politicians to carry through the proposed sale; and for most PEs, profitable or otherwise, the resistance of labour unions and parties on the left has proved substantial.

For the present, in spite of all the criticisms levelled at PEs in recent years because of their poor performance and the consequent campaigns for privatization, they continue to be major channels of development efforts in developing countries. Indeed, it is naive to assume that all the problems with PEs will disappear simply by handing them over to the private sector. According to a study on the UK experience, there is little evidence to support the simple assertion that change in ownership necessarily changes enterprise performance. Based on empirical evidence from ten UK organizations which had undergone a change in status in the last twenty years, Dunsire concluded:

> Perhaps few would hold that a measure like privatization by itself affects performance. The operative mechanisms usually posited are: (a) the policing role of the capital market; and/or (b) an increase in competition; and/or (c) a change in managerial incentives. It is commonly appreciated, too, that the latter two mechanisms may be installed without a change in ownership, and that change in ownership does not necessarily entail them.
>
> Certainly, neither investigation supports the simple assertion that change in ownership necessarily changes enterprise performance, even in its sophisticated form, where capital market change is assumed to be accompanied by increased competition and improved managerial incentives. Sometimes it does, sometimes it doesn't.[7]

After all, in developing countries, the real choice is between an imperfect public sector and an imperfect private sector. Therefore, it is essential to search for ways to make the public sector less imperfect and the nature of PE may be better explored by looking critically at some of its actual uses. This dissertation, therefore, tries to provide an useful case study by exploring the PE sector in the Republic of Korea (hereinafter called 'Korea' or 'South Korea') in conjunction with its social and political environment and their actual contribution during the country's critical period of economic development.

Korea's economic performance during the last three decades has been hailed as one of the outstanding success stories of economic development and regarded as one of a few generally accepted examples of successful national development.[8] From a nation plagued by long-time colonial rule (1910-45) followed by the Korean War (1950-3) and the heavy defence burden subsequently carried, Korea has made rapid economic growth since 1961, when an army general, Park Chung Hee, took power by a military coup.[9] Given the low level of capital formation in the private sector, the government embarked upon a major economic development programme, in which public undertakings were intensively utilised in achieving growth and exercising leverage throughout the economy.

The economic status of Korea before 1961 was that of a typical underdeveloped country.[10] The average growth rate of the gross national product (GNP) during the period from 1954 to 1960 following the Korean War (1950-3) was 4.6 percent. With a population growth rate of over 2.9 percent per annum, a substantial improvement of national income was viewed as a dream.[11] Its small mountainous territory, of which only a little more than a fifth is arable, and its large population made Korea one of the most densely populated countries in the world, 254 persons per square kilometre in 1961 (423 persons in 1989).

In terms of the endowment of production factors, the country is poorly equipped with natural resources. Domestic capital was not sufficient to support a substantial increase in investment for new industrial projects or the expansion of production facilities. The only advantageous factor of production was an abundant labour force whose level of education was relatively high.[12]

The growth trend changed abruptly, however, with the beginning of the First Five-Year Economic Development Plan (FFYP) in 1962. Thereafter, Korea's climb up the ladder of development accelerated.[13] The country continued its rapid growth despite the two oil crises; during the 1961-78 period, the real GNP increased at an average annual rate of 8 percent and per capita income more than tripled in real terms. The two decades of the

1960s and 1970s witnessed such sweeping social and economic changes as few generations in any society have ever experienced. It was in this period that Korea's economic 'take-off'[14] was launched and the Korean economy underwent a deep transformation in its profile, changing from an essentially rural economy[15] to a Newly Industrialized Country (NIC).[16] Thus, the two-decade period was critical in the evolution of the Korean economy and the main economic policy measures established in this period decisively marked the pattern of the country's later development.

How influential has the government been in Korea's development? Some argue that the government's main contribution has been the creation of a favourable economic environment for private enterprise. Thus, according to their view, the unprecedented rapid economic growth that Korea has experienced over the past three decades has been accomplished predominantly without the government's help.[17] Nonetheless, it would be fair to say that the government played a key role in rapid industrial development through, among other things, effective planning[18] and PEs have come to occupy a very vital role in the planned development pattern. Although the government has not always been in a position to dictate policies to the private sector, it has exerted extensive influence on business activities through its administrative power and considerable PE sector.

This work is divided into six chapters. Following the introduction, chapter 2 examines some preliminary issues to do with PE. Chapter 3 provides a summary economic history of Korea in general and the PE sector in particular since the turn of the century. Lack of data on PE precludes any consistent picture of its history, but the target is to organize the existing material in order to throw light on the evolution of the sector in the context of the prevailing environment.

Chapter 4 deals with the analysis of the PE sector's contribution to economic development during the 1960s and 1970s which corresponds to the period of the Park government. Since the 1980s the political and economic environment has changed rapidly and the government can no longer dictate the economy as much as it did before. In compliance with this change, the government gave up its ever-increasing grip on PEs and initiated in 1984 an important reform in the system of control and accountability of the Government-Invested Enterprises (GIEs), the core group of the PE sector. Chapter 5 deals with the reform measures and attempts a preliminary assessment. Chapter 6 is a summary and conclusion.

Two Cultural Heritages

In order to be able to understand the economic and political aspects of Korea, it will be useful to look at the cultural heritages over which highly centralized governments and a constructive public sector have emerged. The long historical continuity, during which Korean cultural and social patterns became firmly fixed, has left two unique heritages to the country. One is a high degree of cultural homogeneity as it became a nation of one race, one language, one culture. This homogeneity of the people is a significant factor in an evaluation of political and social problems. Whatever disunity or diversity appears in Korea is not a product of fundamental differences in race or culture within the community, but a consequence of less substantial causes.[19]

Indeed, of all the nations on the continent of Asia, Korea is the most culturally homogeneous. There is a continuity of a shared ethos and ethnic and linguistic identity that has been historically critical to Korea's survival as a separate culture. It has also given Korea a comparative advantage in development, because there were no significant minorities that had to be integrated into the society and no minority languages that acted as a brake on national education. As an essentially secular society, there was no strong traditional religious elite that could attempt to stem social or economic change, and no major religioethnic nationalism that impeded national growth. No other nation on the continent of Asia, and only Japan among the insular nations, has been in this position. The effects of relative homogeneity on development cannot be quantified, but they may be considerable.[20]

The other heritage is Confucianism, which was introduced into Korea as an instrument of learning and statesmanship during the Three Kingdom period (57 B.C.-A.D. 935) and since then greatly influenced the country's national life and culture. Unlike cultural homogeneity, however, the role of Confucian culture in Korean tradition with respect to developmental values is not clear. Confucianism has generally been regarded as backward, rather than forward, looking. Its emphasis on traditional learning, was said to undercut the acceptance of a more technologically oriented education. Confucianism seemed to regard entrepreneurship and commerce as low on the scale of accepted occupations. Thus, it was argued, Confucianism retarded the sense of social cohesion beyond strictly parochial interests and had an uneconomic focus.[21] Nonetheless, the Confucian philosophy is still pervasive and has great influence on the moral qualities of loyalty to the nation and filial piety.

The Confucian ethical system was adopted officially during the early days of the Yi dynasty (1392-1910) and replaced Buddhism, which had become corrupt. As government posts were distributed to Confucian scholars through civil service examinations, many Confucian institutions of learning were set up, and Korean scholars even made original contributions to the theoretical refinement of Confucianism in the 15th century.[22]

Deuchler points out a more significant role played by Confucianism during this period:

> But more important was the new and comprehensive dimension added to Korea's sociopolitical thought - rather than being a mere vehicle to state office, neo-Confucianism was taken as the universalistic basis upon which the state itself rested.... Neo-Confucianism served a pragmatic purpose. It provided a key to a new understanding of the classical Confucian literature that in turn furnished the details for sociopolitical order and stability. In contrast to earlier Confucian studies that had been stifled by orthodoxy and intellectual pettiness, neo-Confucianism had relevance to the contemporary situation and inspired confidence in the workability of its precepts.[23]

In Confucian society, the family stands in the centre and serves as a bridge between the state and the individual. Therefore, the family is not only the primary social group but also the prototype for all social organization. The individual achieves inner stature as well as social status through participation in and contribution to society, and the family offers the earliest and most favourable opportunity for this life-long course of development. The properly cultivated individual is prepared for regulating the family, then governing the state, and, finally, bringing peace to the world.[24]

One of the outstanding characteristics of Confucian social thought is the emphasis placed on the obligations rather than the rights and prerogatives of the individual in relation to society. And the one basic social obligation common to all is the cultivation of character. Education in general, therefore, is highly valued in Confucian traditions and had been virtually the only route to success and upward social mobility for centuries during both the Yi dynasty and Japanese rule.[25]

The implicit values in Confucian politics are those of harmony, stability, and hierarchy based on absolute authority in a well-ordered social structure. Social harmony had to be achieved through the reconciling of differences in an organic unity, and thus, a well-organized bureaucracy was the harmonious unity in which people of differing talents and professions remained in their proper classes, performed their proper functions and were all equally satisfied and not in conflict with each other. The politics of Confucian harmony aimed at political stability through the governance of changeless ruling elites and not through the conflicting balance and the struggle of divergent forces in a society.[26]

Thus the doctrines of Confucianism advocated a centralized benevolent form of monarchy as the only legitimate form of moral government and emphasized the absolute subordination of the individual to government authority, official doctrines and centralized rule. Korean political culture, by and large, has been moulded by historic residues of the Confucian heritage that disposed most Koreans to a submissive authoritarian psychology. This tended to legitimize the moral authority of the upper strata and contributed to the establishment of interventionist governments.

1. Commonly, PEs account for 10 or 15 percent of a country's industrial output and for a considerably higher percentage of fixed investment.

2. It is not easy to assign a precise meaning to 'economic development'. It is even more difficult to define its meaning when we compare developed nations with underdeveloped ones. However, the customary common denominator is that of per capita income, obtained by dividing the estimated total net national income by the total population. Thus, we can define economic development as a progressive increase in per capita income.

3. The term 'developing countries' will be broadly used to refer to the nations that are primarily agricultural in economic structure and in which productivity, per capita income, and the level of technical achievement are low. 'developing' countries will be used interchangeably with 'underdeveloped' or 'less developed' countries (LDCs).

4. A.H. Hanson, *Public Enterprise and Economic Development* (London: Routledge & Kegan Paul, 1959), p.23.

5. A. Galal, 'Institutional Framework for Efficient and Sustainable Restructuring of State-Owned Enterprises,' *Public Enterprise* vol.9, no.2 (1989), p.112.

6. M. Shirley, *The Reform of State-Owned Enterprises: Lessons from World Bank Lending* (Washington D.C.: World Bank, 1989), p.33.

7. A. Dunsire, K. Hartley and D. Parker, 'Organizational Status and Performance: Summary of the Findings', *Public Administration*, vol.69, no.1 (Spring 1991), pp.21-40.

8. Commenting on Korea's rapid economic growth and consequent changes of industrial structure, the Economist noted that she is no longer seen as a developing country, but as a young industrial economy. 'South Korea also rises', *Economist*, 26 February 1977, p.74.

9. The Korean economy grew at an average annual rate of 8.4 percent from 1962 to 1987, and the per capita GNP reached 4,550 dollars in 1989.

10. In 1961, per capita GNP amounted to 82 dollars and the balance of payments had been in permanent deficit since independence. Total exports in the same year were 43 million dollars; imports were about four times this figure. D. Aikman, Pacific Rim: Area of Change, Area of Opportunity (Boston: Little Brown, 1986), p.24.

11. The population growth rate was reduced to 0.97 in 1988.

12. Developments in education were of revolutionary proportions in the post-liberation period. Educational aspirations, always keen in Korean culture, had been thwarted by Japanese policy; liberation brought an explosion in numbers of students at all levels and in the growth of new elementary schools, high schools and colleges.

13. Watanabe notes that one notable characteristic of the economic development in Korea is the rapid acceleration of industrialization. T. Watanabe, 'Economic Development in Korea: Lessons and Challenge,' in T. Shishido (ed), Economic Policy and Development: New Perspectives (London: Alburn House, 1985), pp.95-7.

14. Rostow postulated that societies passed through 5 stages of economic development: (a) the traditional society; (b) the preconditions for take-off; (c) the take-off, when growth becomes the society's normal condition and a truly self-reinforcing growth process gets under way; (d) the drive to maturity; and, some 60 years after take-off begins, (e) maturity, reached in the age of high mass consumption. W.W. Rostow, The Stages of Economic Growth (London: Cambridge University Press, 1969), pp.4-16.

15. The farm population, 70 percent in 1945 had fallen to 16 percent in 1988.

16. Newly industrialized country (NIC) means a country which is not a developing country but has not yet achieved the status of the advanced countries. G. Bannock and others, Dictionary of Economics (London: Huchinson, 1989).

17. A. Michell, 'South Korea: vision of the future for labour surplus economies?' in M. Bienefeld (ed), The Struggle for Development: National Strategies in an International Context (New York: John Wiley, 1985), p.179.

18. Whereas economic planning was regarded as indispensable to development in the 1960s, recent statements of the conventional view have tended to pass over the contribution of economic planning in Korea.

19. G.M. McCune, Korea Today (London: George Allen & Unwin, 1950), p.14.

20. D.I. Steinberg, 'Development Lessons from the Korean Experience - a review article', The Journal of Asian Studies vol.42. no.1 (November 1982), p.94.

21. Steinberg, p.95.

22. The New Encyclopedia Britannica, 1980ed, vol.X, p.509.

23. M. Deuchler, 'Neo-Confucianism: The Impulse for Social Action in Early Yi Korea', The Journal of Korean Studies, University of Washington, vol.2(1980), pp.71-111.

24. Encyclopedia, vol.IV, p.1097.

25. G.T. Brown, Korean Pricing Policies and Economic Development in the 1960s (Baltimore: Johns Hopkins University Press, 1973), p.38.

26. B.W. Kim (ed), Korean Public Bureaucracy (Seoul: Kyobo, 1982), p.136.

CHAPTER II

THE RATIONALE OF PUBLIC ENTERPRISE

1. Definition

'Public enterprise denotes an organization operating on commercial principles, wholly or partly owned and effectively controlled by a public authority.'[1]

Public enterprises are very varied in their forms and activities, but they have two dimensions in common: they are government owned and controlled (public); and they are engaged in business activities (enterprise). PE, therefore, is a type of business organization, and its basic activities are similar to those of any other firm. But because it is publicly owned and controlled, its management will usually be accountable to some part of the governmental apparatus and so is open to direct political influence, while there is also the strong presumption that the enterprise should be operated in the general public interest,[2] rather than have as its main objective the maximization of profit.

According to conventional economic theory, the aim of a private enterprise, on the other hand, is the maximization of the return on the capital employed, and social goals such as income distribution should be removed from it. This traditional presumption, however, is highly questionable. There are today few managements of enterprises of any importance who would feel themselves free to pursue that aim without regard to numerous considerations of general social and political significance, such as the effect of their decisions on the environment, on employment, and on the national balance of payments. In addition, the divorce between ownership and control of major private enterprises can, as Galbraith has argued, make the continuation, growth and autonomy of the enterprise appear to the management as more important than mere profitability. It would, therefore, be unwise to assume that PE will automatically and invariably observe a greater regard for the public interest than private enterprise.[3]

Ideally, the characteristics of 'public' and 'enterprise' dimensions should make a precise definition which is satisfactory both conceptually and operationally. In practice, this is difficult to do.

A. Issues on the Public Dimension

In some studies of the topic, 'public' means the state's possession of the controlling equity share - either directly or indirectly, usually defined as 50 percent or more of the voting shares. This has been operationalised in some countries.[4] There is a statistical convenience in such a step. But what is the position from the conceptual angle? Although historically government ownership was an essential part of public undertaking in the early days, the essential significance of ownership lies in its being a window for control. Ownership does not always mean control and state control may be exercised with less than 50 percent of the voting shares, since most of the shares are widely dispersed. What is of importance is the role the government seeks to play in the entrepreneurial and major decision-making. It is, therefore, suggested that 'public' should be defined in terms of who controls the organization. If the decision-making power rests with the government, the enterprise should be defined as a PE.[5]

Indeed, when the European Community issued its directive on the financial relations between member states and public undertakings, it offered a definition of a 'public undertaking' which may be taken to be synonymous. The directive states that a public undertaking is one 'over which the public authorities may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which govern it.' The 'public authorities' are defined in turn as 'the state and regional or local authorities.'[6]

Government control, however, does not mean that the state must be involved in the day-to-day operations of the enterprise, concerning itself with such decisions as hiring the labour force, choice of production techniques, or marketing. It means rather that the government has the ability or the potential to exercise control over the broad policies followed by the enterprise, and to appoint and remove the head of firm.[7]

B. Issues on the Enterprise Dimension

PEs produce goods and services for sale, which distinguishes a PE from a public activity in such fields as defence, police, education, public health, sanitation and the protection of the environment. In non-enterprise public activities the availability of an output to a client is not strictly governed by his ability to pay towards the cost of the supply to him. Nevertheless, it is difficult to be precise on what constitutes the core of an enterprise. Two inter-related ideas suggest themselves; financial viability and the cost-price relationship.

Financial viability means a conscious effort on the part of the enterprise towards raising a net revenue. This feature has to be spelt out as viability by intention and in the long run because an enterprise may experience occasional deviations from viability. For instance, there may be little viability during its gestation period; it does not achieve viability during periods of bad business; and its viability may be disrupted under conditions of managerial inefficiency. But the intention is viability in the long run; or else it is not an enterprise and may be deemed as a non-enterprise activity of a governmental agency.[8]

A non-enterprise activity may not be in that position for all time. As public thinking changes as regards the financial rationale of its operations and slides towards viability, its identity alters into that of an enterprise. For instance, warehousing, rural electrification and industrial estates may start as non-enterprise activities; but as the conditions of demand improve and the social justifications for output and price policies weaken, the activities may tilt towards financial viability.[9]

The enterprise concept goes beyond financial viability, and is concerned with the way in which the viability is achieved. It is realised from the sales activity, and significance attaches to the relationship that prices bear to costs. The enterprise does not operate at a uniform fee, like a park authority. It does not levy a charge in relation to the clients' income or seek income through contributions. As an enterprise it goes by cost considerations in determining the payments that customers are to make.

Difficulties exist in operationalising the cost-price relationship because it does not say much about the cost-price basis of enterprise operations. It makes an activity an enterprise if it earns well; and makes it a non-enterprise if it earns poorly. What proportion of the cost it earns through sales is a function not only of efficiency and business conditions but of the public decision interventions, which may cause a serious reduction in net revenues. This by itself does not deflect the enterprise from its enterprise character.[10]

Analogous to the cost-price criterion is the 'marketedness' criterion proposed by Jones. He operationalised it in terms of the proportion that sales revenues constitute out of costs, namely, 'more than half'.[11] Ramanadham pointed out that this idea does not take into account a situation in which a low proportion of sales revenue to costs is the result of enterprise inefficiency or poor business conditions.[12] However, as it renders a clear criterion in the great majority of cases, Jones's definition is widely accepted in Korea. Based on Jones's definition, Sakong defined PE as:

> A productive entity/organization which is owned and/or controlled by public authorities and whose output is marketed, where;
> a 'productive entity/organization' is defined as an identifiable decision-making unit with an explicit or extractable budget, and which produces goods and/or services;
> 'ownership' indicates more than 50 percent of outstanding equity being held by a public authority, either directly by the government or

indirectly by public entities (including other public enterprises);
'control' means the power to be involved in the management of the enterprise through the appointment of top management (i.e., members of the board of directors and/or chief executive); and output is considered to be 'marketed' if sales cover more than 50 percent of current costs.[13]

2. Classification

Recognising that PEs are embodied in various organizational shapes it would be useful to examine these shapes and forms. Some argue that the shapes and forms are not important to a true understanding of PE activity. They say there is rarely any close correspondence between form and performance, which, according to them, depends on the efficiency of internal organization and procedures, and willingness of the political authorities to ensure commercial flexibility.[14] Nevertheless, the external embodiments, shapes and forms have an enormous influence on the style of management and on the relationships which the PE has with the environment and with the controlling authorities.

Praxy Fernandes suggested four possible angles from which one could view the classification of PEs: the intent and purpose of the organization; its legal and constitutional framework; its structure and organization; and the area of economic activity in which the enterprise operates.[15] The most commonly accepted way of classification, however, is the second one and according to this, there are three main legal forms that may be taken by a PE.

A. The Departmental Undertaking

Before World War I there was a widespread assumption in Western Europe that a PE could be fitted into the normal departmental structure of the executive government. The Post Office, in fact, provided the prototype. The justification for this assumption was that in those days governments rarely entered into the more competitive or technologically experimental types of business where entrepreneurial abilities were required for management. The postal and communications services that, in most countries, constituted the bulk of the government's business responsibilities were monopolies or quasi-monopolies engaged in supplying standardized services at fixed prices.[16]

A considerable part of PE activities is still being executed as departmental undertakings. They have all the characteristics of PEs involving capital investment, the production and sale of goods or services, and an accounting system. But they are not established as independent legal entities. They are run as government departments. Consequently, they are subject to the general rules and regulations applicable to other administrative branches of the government. Their employees are civil servants and their budgets are part of the national budget. In Korea they are operated through 'special accounts' of the central government budget.

B. The Public Corporation

One of the major institutional innovations is the public corporation, which was pioneered in Victoria, Australia, and is the form given to most of the British nationalised industries.[17] A public corporation is a public trading body which has a substantial degree of financial independence from the public authority which created it and has two main characteristics. Firstly, it is publicly controlled to the extent that government appoints, directly or indirectly, the whole or the majority of the board of management. Secondly, it is a corporate body free to manage its affairs without detailed control by government; in particular, its financial independence includes the power to borrow, and to maintain its own reserves.[18]

The theory of the public corporation finds its earliest expression in one of W.F. Willoughby's articles, published in 1917. Inspired by the success of British and American colonial policies which were based upon the idea of delegating substantial administrative and financial autonomies to their respective colonial territories, Willoughby recommended this form of organisation for the operation of PEs to relieve the national government and Congress to a considerable extent of the ever increasing scope and variety of functions that were being imposed upon them.[19] Herbert Morrison, who was mainly responsible for the popularisation of the public corporation concept, emphasised the commercial aspects of a board's responsibility. He argued that the commercial activities of government required more autonomy than that provided by the departmental form. Morrison's concept is traditionally associated with an 'arm's length' relationship of corporation and government. Government was seen as performing comparatively limited interventionist functions in the national interest. It was assumed that the board's policies would embody the public interest and that conflict with government on the interpretation of national interest would be very exceptional.[20]

Owned by the government, the public corporation is normally created by a special law defining its powers, prescribing its form of management, and specifying its relationships with superior governmental authorities. Although financed by treasury appropriations or loans, it meets its current costs from the sale of its goods and services, making normal commercial provision for depreciation and reserves. Its budget is separate from the government budget, and it is exempt from the normal regulations applicable to the expenditure of public funds. Governmental powers over the public corporation are usually limited to those assigned by its constituting statute. These, however, may be widely or narrowly defined, and in any case the relevant minister, being responsible for the nomination of the corporation's top-level management, can sometimes exercise an informal influence over its decisions that considerably exceeds the scope of his formal powers.

The essence of the concept of the public corporation is that it is not accountable to a minister for its day-to-day operations and therefore not answerable to parliament in detail for those operations, nor is it directly accountable to the electorate. The nature of the public corporation is well expressed by President Roosevelt. When recommending the formation of the Tennessee Valley Authority to Congress in 1933 he referred to 'a corporation clothed with the powers of government but possessed of the flexibility of a private enterprise'.[21]

Nonetheless, it is now frequently pointed out that the so-called arm's length relationship is hard to achieve in practice. The arguments in favour of the arm's length approach centre on the assumption that, if management could be permitted more freedom to make decisions and to implement them without excessive constraints from government, the performance of public corporation would be significantly improved. Also, boards would be more clearly accountable for their actions provided that relevant criteria could be agreed and that there was some mechanism for reassuring parliament and government that the underlying performance was satisfactory. Based on the experience of the British nationalized industries, the National Economic Development Office (NEDO) reported that the industries' importance as employers, suppliers and customers, and the economic and social implications of their actions make it right as well as inevitable that government should take a close interest in their strategies. It concluded that the public policies involved are so important and politically sensitive that it is not realistic to suppose that the nationalized industries could ever be left alone for long for their own management to determine, subject only to periodic checks by the government on their financial performance.[22]

The question is how best to construct a relationship with a public corporation in which the responsibilities and objectives of both the government and the public corporation are well defined and well understood. Whatever system is adopted it should be appropriate within the culture of the country concerned and its institutions, and appropriate also to the underlying purposes for which each public corporation exists.

C. The Company

An alternative to the public corporation is the state company. When this is used, the law relating to ordinary joint-stock companies is applied to the enterprise, and public control is ensured by the government's exercise of shareholding rights. Originally the state company device was developed in the European countries, but it is now widely employed throughout the world. The public corporation form is frequently used for utilities, while the state company form is favoured when the government enters the field of manufacturing industry.[23]

This form confers on the PE concerned a greater degree of commercial flexibility and more opportunities for private equity participation. The creation of a company may be effected by executive decree; often, it owes its existence to a development corporation, which is authorized to found subsidiaries organized on the joint-stock principle.

Classification of the Korean PE Sector

Broadly speaking, PEs in Korea have taken the three main forms discussed above. Besides this, the sector is conventionally classified into the following five categories according to the varying degrees of government participation in ownership and its intervention in management.

A. Government Enterprises; composed of various governmental departments such as the Office of Monopoly (until 1987) or Office of Railways. They are part of the government itself. Consequently, they are subject to the general rules and regulations applicable to other administrative branches of the government. They are operated through 'special accounts' of the governmental budget.

B. Government-Invested Enterprises (GIEs); enterprises in which the government's equity share is more than 50 percent of the total paid-in capital (i.e., Korea Electric Power Corporation).[24] The government can designate a GIE while holding less than a 50 percent share (i.e., General Chemical Company). Even in this case, the government is still a majority shareholder through both direct and indirect investments. Almost all of the GIEs are established by foundation laws and all of them are autonomous legal entities. The appointment of the top management is to be approved by the President of the Republic.

C. Subsidiary Companies of GIEs; corporations whose majority share holder is a GIE. Some GIEs act as holding companies (i.e., Korea Development Bank). The activities of subsidiary companies are closely related to those of investing GIEs.

D. Other Government-Backed Enterprises; where the government holds less than 50 percent of the stock. In most cases, the government contributes a small proportion of the equity share with the remaining portion subscribed by various bodies in the public sector. The top management of subsidiary companies of GIEs and other government-backed enterprises should be chosen at the stockholders' meeting. Being the majority shareholder through direct and indirectly-held shares, the government can decisively influence the appointment.

E. Local Public Enterprises; these are established by the local governments and provide local services such as water, health and housing. They include Seoul Subways and Pusan Subways. The number of local PEs was only 7 in 1969, but increased rapidly to 119 by 1988, mainly due to the expansion of local services.[25]

3. Origins and Growth

The philosophy of *laissez-faire* which was propounded by the classical economists and which dominated the economic and political scene of the world during the 17th and 18th centuries, started giving way to state regulation and control in the 19th century. With the passage of time, it was recognised that mere regulation and control is not enough, and that to execute its policies effectively, the state must directly participate in business. The First and Second World Wars necessitated a further increase in state intervention. To mobilise maximum resources for war, it was essential for the state to control and regulate the apparatus of production. For most of the countries in the world, but to a lesser degree in the United States, the two or three decades after World War II were particularly marked by increasing intervention by the state in the economic field.

The most important factor leading to an expansion of state intervention in economic affairs was the social injustice which accompanied the industrial revolution. The era of industrial revolution saw the inhumanity of man to man and a brutalization of human nature in those very societies where the greatest advances were being made in the fields of science, technology and organization. Thus, the tremendous increase in government activities and their expansion to areas that may be considered competitive with private enterprise represent a major change in the operation of the free enterprise system. The government has become an economic actor in its own right. PE has become a world-wide phenomenon in the twentieth century and come into existence in all countries, whether capitalistic or socialistic, developed or underdeveloped.[26]

Of the developed European countries operating mixed economies, Britain and France provide the most interesting examples of the evolution of PE sectors through a series of legislative measures. In both countries there was extensive nationalization during the period immediately following World War II, but neither country lacked previous experience of running PEs.

In Britain, the political debate on state intervention and nationalization started towards the end of the 19th century and was initially centred on the railways and coal mines. For instance, government regulation of railways dates from 1840, when the Board of Trade Railway Department was set up. For more than 20 years there had been no significant increase in the government's powers. But from 1868 onwards the tendency towards greater government intervention resumed in the fields of safety, rates and working hours.[27]

The Post Office had already grown up as a government service and has largely remained outside the nationalization debate. Other service industries, such as gas, electricity, water and the tramways were gradually coming into municipal ownership by the turn of the century. Municipalisation of utilities, usually justified on the grounds that they were either natural local monopolies or required regulation of competition in order to meet public service standards, was seen as a separate issue from rationalisation and one which was relatively free from political controversy.

Some PEs were created by Conservative, Liberal and National Governments before 1945, not only as a logical extension of municipalisation but also on 'economy of scale' arguments. For example, in 1908 the Port of London Authority was established and, soon after, the Post Office was given an effective telephone monopoly. In 1926, the Central Electricity Board was set up in order to achieve the nationwide economies of scale which had become technically feasible. In 1933 the London Passenger Transport Board was created with the purpose of achieving a coordinated and unified public service, and road passenger transport in other cities was already in part owned by public bodies. In 1939 the two civil airways companies, already heavily subsidised, were nationalised.[28]

Britain also nationalized the Bank of England as well as the coal industry in 1946. In the same year, the Labour Government created three independent public corporations: British Overseas Airways Corporation, British European Airways and British South American Airways. In 1947, several transport industries, including the railways, were nationalized, and the gas industry became state-owned in 1948. The major part of the iron and steel industry was nationalized in 1949.[29] After the major nationalization programme between 1945 and 1951, Britain maintained a significant PE sector in the economy until Margaret Thatcher came to power in 1979.

In France, although a dirigiste tradition has existed ever since the days of Colbert in the 17th century, it was only after World War II that major political action was taken to set up PEs. The turning point was General Charles de Gaulle's speech in October, 1944 when he announced the takeover by the state of the management of all large wealth. A morality argument subsequently led to the public appropriation of firms whose owners had collaborated with the Nazis during the war. This was the case with Renault and the two companies that today comprise SNIAS.[30] In addition, successive governments had established the National Nitrates Office, acquired a majority of shares in the *Compagnie Générale Transatlantique* and the railways, nationalized the aircraft manufacturing companies, and become a majority or minority participant in the equity of a number of other undertakings. France undertook a much more extensive nationalization than Britain of financial enterprises. While Britain brought the Bank of England under public ownership, France nationalized not only the Bank of France but the four great deposit banks, 34 insurance companies, and a variety of other financial institutions.

Similarly, developing countries have many examples of PEs. There is hardly any country where the government does not actively participate in the establishment and management of PEs. Such enterprises range from transport systems, generation and distribution of power, supply of water, mining and processing of minerals and banking to various industrial enterprises. The growth of PE is due to a variety of motives, pressures and purposes which differ from country to country, and from government to government.

4. The Motives

State ownership has been argued for various reasons such as ideology, economic reasoning, social structure and administrative convenience. Although elements of each of these explanations can be found throughout the history of state ownership in different countries, none gives the total picture in all its complexity. Countries differ in their cultural heritage, economic structure, the traditional role of government and the availability of indigenous entrepreneurs. PEs have been created for a variety of practical reasons including the stimulation of economic growth, the development of priority sectors of the economy, the acquisition by the nation of enterprises previously owned by non-nationals, investment in a sector not attracting private capital but considered vital to the economy, the pursuit of specific social objectives through direct government intervention, and support for economic recovery in a time of crisis. Of course national resource development can also be achieved and economic benefits maximised by government intervention in a number of ways other than by direct government ownership and participation.[31]

The PE was chosen as the best organisational entity for these purposes for a number of reasons. Essentially it enables government to retain policy and financial control over an enterprise, while at the same time permitting it to operate independently of civil service rules and regulations. Although the release from civil service regulations was not an unmitigated blessing, it was considered desirable in order, for instance, to offer higher salaries where necessary to attract qualified managerial and professional personnel and to take decisions easily and promptly without the necessity of going through several ministerial channels for approval.

The extent and nature of governmental involvement in the productive activities of a country are largely determined by a government's political philosophy, the state of economic development of the country and historical circumstances among other factors. Thus, PEs have invested in highly capital-intensive industries as a means of import substitution in some countries. The involvement of PEs in such industries is usually intended to make the country industrially independent of other countries.

In other cases, PEs are in capital-intensive industries because of entrepreneurial substitution by the state. This is the case with industries such as steel in Korea and Argentina. This development takes place because of the inability and unwillingness of private entrepreneurs to invest due to the size of the projects or the risk and uncertainty involved. Still another reason may be to prevent the widening of a technological gap or to achieve a higher level of technology. This is one reason that state intervention and investment increased in some of the European countries. They were concerned about the widening of the technological gap between Europe and the United States that could place their domestic industries in a weaker competitive position and place them under the control of international companies. For example, in Italy, investment in highly modern food processing PEs is the result of a fear that U.S. firms would dominate Italian food processing companies.[32] In such cases the underlying reasons for state control played a more important role than any other factors.

These factors sometimes overlap, and therefore, a clear-cut distinction for discussing a single cause is almost impossible. However,if we take this question conceptually rather than historically, ideological and economic factors seem to be the most important reasons for the existence of PE.

A. Socialist Ideology

In socialist ideology, the transfer of ownership of wealth-producing assets from the private to the public sector is a prerequisite for a better world and for social justice, and a necessary condition for a true democracy. The British Labour Party's nationalization policy in 1945-51 sprang from a conviction that socialism requires the public ownership and operation of the basic industries concerned with fuel and power, transport and the essential raw materials on which the entire economy depends.[33]

It was further held that a policy of full employment demands effective control of currency and credit through public ownership of the central bank. Although this view was a naive assumption, it was reinforced by bitter memories of Bank of England policy during the great depression in the 1920s and 1930s. It was argued that industrial well-being was sacrificed to financial interests, capital expenditure restricted by high rates of interest and the misery of prolonged unemployment suffered by millions of people for nearly two decades. The Labour Party determined that never again should the people be at the mercy of Bank of England policy at all costs. The financial crisis of 1931 was also remembered as an indication of the case with which financiers can create a state of insecurity and bring about a political crisis by manipulating the instruments they control.

There was the argument that certain industries which are by their nature monopolistic must be taken over because it is too dangerous to leave them to be exploited by private enterprise for profit. There was the belief that competition leads to a waste of resources and that nationalization would avoid duplication in at least the basic industries which require very large capital expenditure. It was hoped that, if capitalist enterprise were replaced by public ownership and operation, an era of harmonious labour relations and greater equality would be ushered in. These general doctrines played a very important role in prompting the Labour Governments of 1945-51 to launch the nationalization programme.[34]

At the other ideological extreme, any government intervention in the workings of economic markets is perceived to be wrong and evil and leading to an excessive and dangerous concentration of power. Moreover, government is assumed to be both corruptible and incapable of running business activities efficiently.[35] Those who argue thus maintain that it is possible to maintain full employment in a mixed economy without having to extend the scope of the PE sector. In addition, greater equality has been brought about not so much by nationalization as by the growth of social services, severe taxation of high incomes, and an increase in the share of the national income enjoyed by wage and salary earners, resulting from the power of the trade unions.[36]

There is a tendency in Britain to regard PE as a question of political ideology, with the Labour Party being seen as the party of nationalization and the Conservatives as the champion of private enterprise. However, the reality is more complicated and political ideology has not consistently applied. The first important nationalization measures of the present century were enacted by Conservative governments. Since the major nationalization programme, Labour governments have fought shy of much further extension of public ownership, just as Conservative governments did little to reduce it before 1979. Professor Parris describes this trend:

> It would be more accurate to say that until 1979 both Labour and Conservative governments tended to foster a kind of corporatism: restricting competition in both public and private sectors; maintaining a consensus with trade unions, financial institutions and business and professional associations; setting up *dirigiste* bodies (such as the Industrial Reorganisation

> Corporation designed to promote mergers); and in this process limiting the scope for innovation in industry and the consumer's freedom of choice. The reaction against these developments has tended to concentrate attention on the failings of public enterprises, especially those supplying the public directly. The large monolithic public corporation created by the post-war Labour government soon became unpopular with the British public. The present day Labour Party seems to be recognising the disadvantages of the Morrisonian concept of nationalisation and now talk of a shift towards more flexible forms of public ownership, exposed to some degree of competition.[37]

Nevertheless, ideology does count for something, and in some countries and at some periods it counts for a good deal. This explains the contraction of the PE sector in Britain since 1979 and the spectacular growth of the PE sector in France in 1982, when 6 big industrial corporations and 66 banks were nationalized by the Left wing party.[38]

Ideological reasons were important in certain developing countries. The belief that government control over the commanding heights of the economy is a necessary condition for establishing socialism is explicitly stated in the 1948 and 1956 Industrial Policy Resolutions in India, in which certain industries are declared as exclusively reserved for public ownership. Tanzania also created many PEs on the basis of socialist ideology.[39]

B. Economic Reasoning: Market Failure

The market system is said to fail to achieve, because of imperfections in itself, economic efficiency (Pareto-optimum) which is feasible given the resources and technological possibilities in the economy. Market failure may manifest itself either in the inability of the system to produce goods which are wanted or by a maldistribution of resources which could be improved in such a way that some consumers would be better off and none worse off, i.e. resource allocation is not Pareto-optimum.

Theory suggests that market failure tends to occur in the presence of monopoly and oligopoly or when significant externalities exist. In these cases it is argued that government intervention is justified and then suggested that setting up a PE to supply the goods or service concerned is a means of 'correcting' the market failure.[40]

The most relevant and important example of this is the case of so-called 'natural monopoly'. A natural monopoly exists when cost conditions in an industry are such that one firm can produce a particular output at a lower cost than is possible under any other organization of production. Where there is only one output, natural monopoly would result from significant economies of scale up to the level of market demand. Where there are several outputs, 'economies of scope' rather than economies of scale may give rise to natural monopoly. That is, it may be cheaper for one firm to produce the entire set of outputs than for different firms to produce subsets of them.

Natural monopoly has been a very marked feature of the so-called public utilities - water, gas, electricity, rail transport, telephone services - where high costs have to be incurred in establishing a supply network. It would be prohibitively expensive to have two or more competing firms constructing alternative networks so that each consumer would have a choice of supplier. A single network then has been taken to imply a single seller.

If the seller is a profit-maximizing monopolist, theory predicts that price will be raised above marginal cost and output of the good will be restricted below its optimal level. To have the natural monopoly in the hands of a PE may then be seen as a way of retaining the cost advantage of a sole seller while preventing the resource misallocation which would result from a profit-seeking monopoly.[41]

The argument for PE as a corrective of the market failure could be extended by considering the possibility of dynamic market failure. This refers to the proposition that the private capital market in an economy may be insufficiently well developed, or investors in it too myopic or risk-averse, to provide adequate finance for important sectors of industry. Organizing these sectors as PEs and supplying them with capital raised by the state is then seen as a means of compensating for the shortcomings of the private capital market.

In the early 1970s, two important British companies, the motorcar manufacturers British Leyland and Rolls-Royce, were on the verge of bankruptcy. The financial institutions which were the major creditors of the companies were unwilling to supply further finance, presumably because they were pessimistic about the chances that the companies would be able to return to profitability within the time horizon they considered appropriate. The general consequences of these bankruptcies - in terms of lost employment, exports, and, in the case of Rolls-Royce, technological capabilities - were considered sufficiently serious that the companies were nationalized, or reconstituted as PEs.

Substantial injections of capital were made, not only to restore the companies to financial viability but also to finance investment in new production facilities. As PEs, the companies were able to rationalize and invest, whereas the scale of losses and the view taken of the time required and risks involved in their return to profitability deterred private investors from financing this process.[42]

1. The New Encyclopedia Britannica, 1980ed, vol.XV, p.198.

2. 'Public Interest' is a phrase used by those who seek to identify concerns generally considered to be private with concerns that are perceived to affect the public as a whole. A considerable body of literature has developed about this, because it represents an important philosophic point that, if found, could provide guidance for politicians and public administrators alike. J.M. Shafritz, The Dorsey Dictionary of American Government and Politics (Chicago: Dorsey, 1988).

3. J.K. Galbraith, The New Industrial State (Boston: Houghton Miffin, 1978), pp.174-86.

4. For example, the Indian Companies Act defines a government company as one 'in which not less than 51 percent of the paid-up share capital is held by the Central Government or partly by the Central Government and partly by one or more State Governments'. Indian Companies Act 1976, Sec.617.

5. V.V. Ramanadham (ed), The Nature of Public Enterprise (London: Croom Helm, 1984), p.63-64.

6. 'Commission Directive of 25 June 1980 on the transparency of financial relations between member states and public undertakings', Official Journal of the European Communities, 29 July 1980.

7. M. Gillis, 'The Role of State Enterprise in Economic Development,' Social Research vol.47, no.2 (Summer 1980), p.252.

8. Ramanadham, p.22.

9. Ramanadham, p.26.

10. Ramanadham, p.66.

11. L.P. Jones, Public Enterprise and Economic Development (Seoul: Korea Development Institute, 1975), p.23.

12. Ramanadham, p.65.

13. I. Sakong, 'Macroeconomic Aspects of the Public Enterprise Sector', in C.K. Park (ed), Macroeconomic and Industrial Development in Korea (Seoul: Korea Development Institute, 1980), p.100.

14. Encyclopedia, p.201.

15. P. Fernandes, 'Public Enterprise: a word and a vision', Public Enterprise, vol.1, no.2 (1980), pp.58-59.

16. Encyclopedia, p.200.

17. V. Bogdanor (ed), The Blackwell Encyclopedia of Political Institutions (Oxford: Basil Blackwell, 1987), p.509.

18. National Economic Development Office (NEDO), A Study of UK nationalised industries (London: HMSO, 1976), Appendix vol, pp.1-2.

19. R.S. Arora, Administration of Government Industries (New Delhi: Indian Institute of Public Administration, 1969), p.10.

20. NEDO, appendix vol, pp.80-1.

21. Bogdanor, p.509.

22. NEDO, pp.44-5.

23. Encyclopedia, p.200.

24. 'Government-Invested Enterprise Administration Law', Article 2.

25. B.N. Song, The Rise of The Korean Economy (New York: Oxford University Press, 1990), pp.117-118.

26. K.R. Gupta, Issues in Public Enterprise (New Delhi: S. Chand, 1969), pp.1-4.

27. H. Parris, Government and the Railways in Nineteenth-Century Britain (London: Routledge & Kegan Paul, 1965), p.212.

28. NEDO, appendix vol, p.75.

29. Y. Aharoni, The Evolution and Management of State Owned Enterprises (Cambridge, Massachusetts: Ballinger Publishing, 1986), p.105.

30. M.A. Ayub and S.O. Hegstad, Public Industrial Enterprises: Determinants of Performance (Washington D.C.: World Bank, 1986), Industry and Finance Series vol.17, p.56.

31. These would include the application of appropriate tax regimes; the control of investment, production and trade, wage regulations; and policies to promote balanced regional development which would, in turn, include measures to spread employment opportunities evenly across the country.

32. M. Haririan, State-Owned Enterprises in a Mixed Economy: Micro versus Macro Economic Objectives (London: Westview, 1989), p.5.

33. TUC Interim Report on Public Ownership, 1953, para.7.

34. W.A. Robson, Nationalized Industry and Public Ownership (London: George Allen & Unwin, 1962), pp.42-43.

35. Aharoni, p.101.

36. A.H. Hanson (ed), Nationalization: A book of readings (London: Allen & Unwin, 1963), p.25.

37. H. Parris and others, Public Enterprise in Western Europe (London: Croom Helm, 1987), p.15.

38. Aharoni, p.101.

39. Aharoni, p.102.

40. G. Bannock and others, Dictionary of Economics (London: Hutchinson, 1989), p.262.

41. R. Rees, Public Enterprise Economics (London: Weidenfeld and Nicolson, 1984), p.3.

42. According to Rees, this was carried out by a Conservative Government in implicit endorsement of the market failure argument. Rees, p.3.

CHAPTER III

THE EVOLUTION OF PUBLIC ENTERPRISES IN KOREA

Before moving on to discuss in detail the role of PEs in economic development, it will be necessary to make some observations on Korea's turbulent modern history with regard to the socio-political background for industrialization, through which the dominant role of the public sector has emerged. Since the late 19th century, Korea has been beset by successive calamitous events which have brought destruction and profound distress to all portions of society. Geopolitically situated where the convergent interests of states all larger and more powerful than itself are focused, it has been a battleground, an invasion route, a colony and a divided country which has seen physical, cultural and political devastation on a rarely equalled scale.

1. The Historical Background to Modernization

During its 500-year rule the Yi dynasty (1392-1910) passed through several brilliant periods of intellectual and cultural achievement.[1] But in the latter 19th century, while the country was attempting to adjust to the western international system, the dynasty fell into a state of disintegration. A long policy of isolation had not only preserved the country's identity and territorial integrity but had also cut off Koreans from the flow of ideas and technological development that penetrated much of the rest of the world. An extremely centralized autocracy, free from sustained internal critical force, external pressure and foreign influences for several centuries, had become weak and corrupt. The result was inept response to new demands upon the government that arose as foreign powers entered into relations with Korea. The Confucian principles had been pursued to such extreme ends that government was corrupt, inefficient and inflexible.

The social class in the Yi dynasty was loosely divided into the ruling (*yangban*) and the ruled classes. The *yangban* class made up the bulk of the officials of the imperial bureaucracy until they were pushed out by the invading Japanese bureaucrats. The *yangban* aristocracy consisted of two subgroups: the civilian (*munkwan*) and the military (*mukwan*). Industry consisted primarily of household industries producing basic consumer goods, such as textiles, ceramics, paper, rice-cleaning, brewing, metal-working, cabinet-making and the like.[2] During much of the Yi dynasty, social restrictions has discouraged activities that were generally regarded as economic in nature. The *yangban* class was forbidden to engage in trade, and the merchant class (many of them pedlars), constituting about 6 percent of the total population, received encouragement from neither the national policy nor the normative social system.[3]

Therefore, the disintegrated state of the society when Korea emerged from isolation was severely reflected on industry and the unusual economic backwardness was appropriately reported by McCune:

> An earlier notable craftsmanship had suffered a long decline and the singular isolation of the country left technology sterile. The stagnated Korean economy was meagre, much more so than even that of either Japan or China. The country remained medieval. Political corruption and decadence thwarted economic development. Wealth and the instruments of economic action were in the hands of the long-since impotent noble yangban class, or landed aristocracy. The bulk of the population remained tied in virtual serfdom to the land. The absolutism and caprice of the system with its oppressive taxes, venal exactions, and extreme insecurity of property successfully prevented the rise of a sizable and influential merchant class such as was associated with the evolution of European capitalism from the medieval economy.[4]

For many centuries Korea had maintained tributary status within the orbit of the Chinese Confucian system without restricting her own independence. Contact with China, therefore, had been relatively unhampered and extensive. There had also been a more or less constant contact between Korea and Japan from 1609 on, although these contacts were limited to one port, Pusan.[5] Trade was carried on between the two countries through this port and a modern 'Kanghwa Treaty' took the place of the old agreement in 1876. Yi dynasty's unpreparedness for foreign trade, however, accelerated the penetration of Japanese capitalism. Initially, the Japanese were not bound by treaty to pay tariffs, thus deprived Korea of a means of protecting her inefficient handicraft industries. Moreover, Yi dynasty's defective monetary system led to the influx of foreign money.[6]

In the decade 1895-1905 western diplomacy opened Korea to much greater western influence. For a time after Korea was opened up, China was able to maintain her traditional influence and in a limited way encouraged economic development. Russia obtained significant trading rights but lacked the capital to invest. For a time American capital played an important role: the first modern mines, the first electric lighting, the first modern office building, the first gas plant and the first street railway were all American. The first railway in the country, the line from Inchon to Seoul, was commenced under concessions to Americans.[7]

At this time Russian interests in Korea came into conflict with Japanese imperial ambitions. The ultimate result of this clash was the Russo-Japanese War (1904-5) which successfully eliminated the Russians from their position as rivals of the Japanese in the peninsula. The United States could have aided Korean independence, but any initiative by its representatives in Korea was frustrated by the U.S. government's indifference and indecision.[8] Consequently both the international rivalry and the unique importance to American enterprise were short-lived. Step by step, in spite of vigorous opposition by the Korean people, Japanese ambition was accomplished. Annexation was finally completed in 1910, at which time Korea became a colony of Japan.

Nonetheless, the failure of Korea at the turn of the century was in her political leadership, not in the society as a whole; certain elements of the society were far ahead of its political leadership. The Japanese were able to undertake most of their reforms and institution building on a base of Korean precedents, both legislative and educational.[9]

2. Industrialization during the Colonial Period

In subjugating Korea, the Japanese had an advantage over the West in sharing some of the same Chinese tradition and the Chinese writing system. However, Korean hostility toward Japan was traditional, and memories of the devastation wreaked by Hideyoshi's forces in the late sixteenth century were still vivid. Moreover, the Koreans did not consider the Japanese to be superior, as some peoples did consider their colonial overlords. On the contrary, the Koreans thought of themselves as superior.

It is now generally acknowledged even by the Japanese that Korea was the source, or the channel for many Japanese cultural elements.[10]

Japan had officially publicized its colonial role as primarily that of a teacher and civilizer to promote an image of benign capitalism. Yet the prominence of military leaders[11] selected to direct the colony and the stringency of their control were evidence of the strategic importance of the peninsula: a buffer against continental aggression and a base for expansion into Manchuria and China. An example of this role was the railways. These were in large part conceived as a means of transshipment of Japanese goods into Manchuria, and a number of them had been built solely for military reasons. In 1936 the Japanese Director of the Government-General Railway Bureau made a telling statement on the role of Korea and its transportation system in Japanese affairs:

> With the advent of Manchoukuo as the turning point, there has taken place... an almost phenomenal economic development, naturally followed by the spectacular growth of general transportation means. Thus the mighty trio of Government railway lines, private lines and motorcar routes, coupled with the Japan Sea routes... have elevated the peninsula to a position more valuable as a land-bridge connecting Japan with the continents of Asia and Europe. Inasmuch as Chosen constitutes Japan's barricade and life-and-death line of vital importance from a view-point of national defence, it is all the more significant to complete the network of transportation in the peninsula.[12]

In addition, the Japanese government never wavered in its commitment to security and economic development of the peninsula. In the proclamation of annexation in 1910, the Governor-General declared:

> It is a natural and inevitable course of things that two peoples, whose countries are in close proximity with each other, whose interests are identical and who are bound together with brotherly feelings, should amalgamate and form one body. Being desirous of securing the safety and welfare of Chosen as well as of maintaining the permanent peace of the Extreme East, His Majesty the Emperor of Japan has, in compliance with the wish expressed by the Sovereign of Korea, accepted the cession of all the rights of sovereignty over the country... The fundamental object of administration is to promote the security of life and property, whereon depends the general industrial development of a nation... In coming to this country under the command of my Imperial Master, I have no other desire than that of increasing the welfare and happiness of the people placed under my administration.[13]

In reality Japanese domination of Korea was no more beneficial for the Koreans, and possibly less so, than were other colonial regimes for their subjects. A forced-delivery (*kongchul*) system was an example. As it became impossible to supply food by free purchase, the Japanese government imposed a stated price on rice produced in Korea from 1940 until August 1945. The quota for rice under the forced-delivery system amounted to over 70 percent of the total production at a price lower than half of the production cost.[14] Exploitation was the keynote and virtually every development was undertaken with the objective of maximizing the benefits which would accrue either directly or indirectly to Japan. It was observed that there are few countries in the world, even among the colonies, where such a large portion of the goods were taken out of the country.[15]

Accordingly, the Korean economy became highly dependent upon Japan for capital, technology and management. Of the total authorized capital of business establishments in the peninsula, the Japanese owned approximately 94 percent as of 1940. Japanese engineers and technicians employed in manufacturing, construction, and public utilities in 1944 constituted about 80 percent of the total technical manpower in Korea. The proportion of Korean engineers and technicians was particularly small in the metal and chemical industries (11 to 12 percent). The relative number of Korean business establishments was very small in high-technology industries - about 10 percent in the metal and chemical industries and 25 percent in the machinery industry.[16] Most Korean establishments were small and used simpler technology. As a consequence few Koreans had been trained in skills required for self-directed economy through the colonial period.

The Government-General kept a tight rein on the Korean populace and denied their political participation while encouraging a limited role in the economy. The state played a key role in the colonial economy through changes in civil law relating to finance, with legislation affecting the mobilization of capital and credit resources, but also with its own massive resources for investment. The Government-General and associated agencies held 19 percent of total Japanese assets on the peninsula by 1945, amounting to 14.9 billion yen out of a total of 88.6 billion yen of real estate and plant investments.[17]

In the Meiji era (1868-1912), the imperial Japanese government fostered modern PEs, often using funds borrowed from abroad and employing Europeans as advisers. Once the industries were brought to a paying basis, they were sold to private companies. Thus, it was the government who launched the industrial revolution in Japan.[18] Therefore, it was natural that PE was among the first Japanese institutional exports to the new colony. As early as 1908, two years before annexation, the Japanese residency general ran both Rail and Communications Bureaus employing over 4,000 people or more than 40 percent of the total government employment.[19]

The most important later addition was the Monopoly Bureau which was responsible for buying, processing and selling ginseng, salt, opium and tobacco. Ginseng had long been an official monopoly as had salt imports, but with annexation both activities were expanded and salt production added. Tobacco was added to the list of monopoly products in 1921, following unsatisfactory efforts at extracting excess profits via special taxes.[20] Opium was added in the 1920s, but yielded only a few percent of total monopoly profits. Overall, the departmental PEs accounted for about one-quarter of total government revenue in the decade following annexation, and this increased to over 50 percent from 1926 on. Expenditures generally exceeded revenues prior to 1926 but were below them for the next decade, resulting in profits contributing amounts equivalent to between 5 and 35 percent of the total tax revenue.[21]

Apart from the departmental PEs, there were some joint-stock companies with strong government involvement. Among them, the Oriental Development Company (ODC), the Bank of Chosen, and the Chosen Industrial Bank are worth mentioning. ODC was established in 1908 for Japanese agricultural migration to Korea, and later expanded into a development company with extensive landholding and finance capital for agricultural and industrial projects. By 1942, the firm operated branches in China and Manchuria as well as Korea, with an authorized capital of 100 million yen and an annual budget of 512.5 million yen. Among the largest shareholders, the Finance Ministry in Japan held 3 percent and the Secretary of the Imperial Household held 2.5 percent.[22]

As an holding company, ODC owned and managed large tracts of land in the peninsula and invested heavily in major utilities and resource development projects. The firm held large blocks of shares in leading utilities such as the Chosen Railway Company, Chosen Electric, Nansen Hydroelectric, Chosen Electric Transmission, and the Chosen Yalu River Hydroelectric Generation Company. Mining investments included equity in Chosen Petroleum, Chosen Anthracite Coal, Chosen Magnesite Development, and its own Totaku Mining.[23]

The Bank of Chosen and the Chosen Industrial Bank played a major role in capital formation in the peninsula, whether in support of other banks, or providing credit and subsidies for large-scale projects in agriculture, business and industry. The Bank of Chosen functioned as a central bank and later as a main financial institution for Japanese expansion into Manchuria. Within the peninsula the Bank was responsible for currency circulation and foreign exchange, treasury operation for the government-general, and providing commercial banks with funds for loan operations. The government-general was the leading stockholder in the bank with about 4 percent of the shares.[24]

The Chosen Industrial Bank specialized in medium and long-term financing for agriculture and industry in the peninsula, based on a system of regional development banks. The colonial authorities reorganized the regional system into the Chosen Industrial Bank in 1918 with a substantial increase in capital and debt ceiling, and a network of 47 branches. Two decades later the bank operated 74 branches, the most extensive banking operation in Korea. The Japanese Imperial Household and the government-general were major stockholders in the joint-stock corporation.[25]

Because of political oppression and economic exploitation by the colonial regime, many Koreans are reluctant to acknowledge any beneficial contribution made by the Japanese during the occupation period.[26] Nonetheless, a less critical evaluation was made by a Korean scholar:

> During the thirty-six year annexation period, Koreans were never allowed to participate in any political activities in a modern sense. However, in the fields of thought, literature and religion, they had access to the trends of the times to some extent; from the economic point of view, although they lived under a capitalistic economic system, the Japanese had complete control over the Korean economy. And from the social point of view, Korean society, whether compulsorily or spontaneously, was gradually growing into a modern society.[27]

Indeed, although the Japanese regime benefitted the Japanese disproportionately, the changes set in place during the 35 years of occupation would affect the society and economy of Korea well after liberation in 1945. Urban residents grew from 3 percent to 13 percent of the total population between 1910 to 1944.[28] The Yi dynasty capital of Seoul and later, headquarters for the

Japanese colonial administration, prospered as a major industrial and commercial centre with a population of nearly one million. Other cities such as Pusan and Pyongyang developed as regional centres of commerce and industry.

Urban centres flourished with increased currency circulation, commercial banking, and growth in trading, manufacturing, and regional markets for commercial agriculture. The value of agriculture production nearly doubled through 1940, and the value of mining and manufacturing increased some 1500 percent from 1910.[29] Such data would support the more positive evaluation of the colonial contribution to economic growth.

3. Postwar Turmoil and Reconstruction

In the 16 years between the end of colonial rule in 1945 and the establishment of the Park Government, the South Korean people struggled to develop and survive in the face of a severed nation, American military rule (1945-48), the increasingly inept Syngman Rhee Government (1948-60), a devastating Korean War (1950-53), the April Student Revolution (1960), the short-lived Chang Myon Government (1960-61), and the military coup led by Park in 1961. With the compressed political turmoil, massive social dislocations and horrifying destruction of life and property that occurred in this period, consistent economic policy and sustained progress were impossible.

When Japan was defeated in the War, Korea, like Germany, emerged as a divided country as a result of the military occupation by the United States in the south and by the Soviet Union in the north of the peninsula. The north became a pawn of Soviet power, the south of American power. The south was run by an American military government from 1945 to 1948, when the first national elections were held and an independent government was established.

By the end of the colonial rule, industry in Korea was such an integral part of the economy of Greater Japan that most of the existing industrial plant was incapable of independent operation. For capital goods Korea relied almost wholly upon Japan, and certain important stages in the production of consumer goods also depended on Japanese parts or supplies. For example, light bulbs were fabricated in Korea, but the tungsten filaments used in these bulbs were manufactured in Japan, even though Korea was a large producer of tungsten ores. The ores were shipped to Japan to be refined and manufactured into wire, which was then shipped back to Korea for use in the production of light bulbs.[30] Therefore, the sudden retreat of the Japanese and the separation of the economy from the Japanese economic bloc brought about a suspension of many production activities in Korea.

In addition, the collapse of trade between the north and south brought utter economic chaos to South Korea. Most of the natural resources and heavy industry were concentrated in the north, while the country's food-basket and light industry were in the south. Approximately 92 percent of the average annual power generation had come from plants in the north. The north also produced about 90 percent of Korea's output of metal products and 83 percent of its chemical products in 1940. By contrast, the south accounted for 85 percent of textile production and 89 percent of printing and publishing output.[31]

Between 1945-50, an influx of Korean repatriates from Japan and elsewhere and a flood of refugees from the communist regime in the north increased the population by 20 percent.[32] Rice production, which had depended on fertilizer produced in the north, fell, while what rice was produced failed to reach the urban populations and was consumed in the countryside. Mass starvation was averted only by the importation of large quantities of wheat from the United States. North Korea cut the supply of electricity in May 1948, depriving the south of over half of its already inadequate power.

What industry had been located in the south was unable to function for lack of raw materials and energy.

In 1946, South Korean manufacturing plants had been reduced by more than half of the pre-1945 number and those still in operation were producing at only 20 percent of capacity. Transportation and mining facilities likewise posed serious rehabilitation problems after liberation. The railway was able to keep no more than 55 to 60 percent of its locomotives in operation in the 1946-47 period, and at one point only 30 of Seoul's 257 trams were in operation. Many mines did not resume operation for many months to several years after liberation and required extensive rehabilitation.[33]

Nevertheless, there were good harvests and substantial progress in industry during the first two years of the First Republic: coal production was increased by 40 percent; power generation by 33 percent; industrial production by 50 percent. For the people in the south, this was probably the best year they had had in a decade. Despite formidable obstacles, the economic outlook in the spring of 1950 was reasonably optimistic.[34]

An important and popular land reform was implemented during this period. It was inaugurated in June 1949 to redistribute some 23 percent of the total arable land in South Korea which had previously been owned by Japanese or by Koreans with more than 7.5 acres. Approximately 970,000 tenant farmers and landless farm labours became landowners, and about 570,000 small farmers were able to expand the size of their holdings. Thus about 62 percent of Korea's 2.5 million farm families benefitted from the reform.[35] Tenant farming was abolished in a country where a century before most of the population were serfs or in near serf status. There were some complaints that the fragmenting of larger farms reduced total production, but the political and social advantages were enormous. The land reform may well have been the most important political and economic accomplishment of the decade in Korea, since it was the only major programme which responded fully and directly to the aspirations of the common people.

Partially as a result of Japanese policy restricting the rise of a Korean industrial or management elite, the business caste in Korean industry was small. And by 1945 considerable fluidity and laxness were evident in the older class structure as a result of the long decline in the political and economic foundations of traditional class distinctions. Many of these levelling influences, particularly the economic ones, were further reinforced by the land reform and the destruction during the Korean War.

The Korean War, however, wiped out the fragile industries in a few months as the North Korean armies advanced south in June 1950. Battles raged up and down most of the peninsula until the front stabilized around the 38th parallel and a truce was signed in July 1953. The level of destruction was extremely high even by the standards of modern warfare. In addition to the millions of people killed and injured, industrial facilities were heavily bombed, thus eliminating most of the limited industrial capacity. Physical loss in the south was equal to the entire 1953 national product.[36]

The patterns of economic development in the two halves of Korea, which were already divergent before the war, moved rapidly in the direction of capitalism in the south and communism in the north. In the south, what was left of the industrial plant was mostly turned over to private owners - some of whom, however, were chosen as much for political loyalty as for economic acumen. Although there was some investment in import-substitution industries and textiles, the primary emphasis was on food and other consumer goods to meet minimal living requirements. With revenues from foreign aid supporting over half the republic's budget, the economy had fairly well stabilized by 1957, and living standards had recovered to pre-World War II level.[37]

The Inherited Public Enterprises

When Korea was liberated she inherited over 2,500 operating industrial and business enterprises from the

Japanese.[38] Most of these, dissipated though they were at that time, were taken into government control, thereby constituting a public enterprise sector from the beginning: a few of the largest enterprises inherited were turned over to be managed by nascent government departments (i.e., electricity, railways, communications, tobacco, and coal mining).

The bulk of manufacturing enterprises, however, were entrusted to the American Office of the Property Custodian which delegated operating responsibility to selected Korean managers. In January 1948, not more than 20 percent of these enterprises were in full or partial operation. Although economic circumstances were highly unfavourable to an effective transfer, the political and social chaos were even more important deterrents. As an American official reported, 'The property custodians were subject to all sorts of pressures from high-ranking military officers, representative of national agencies, their civil officer colleagues, and Korean friends'.[39]

The Korean War not only devastated fragile industries but also brought a shift in the official attitude towards PE. The 1948 constitution had a decidedly socialist bent, specifying public ownership of a broad range of economic activity and open-ended provisions allowing nationalization of any other industries 'related to the public welfare' or where 'required for vital and urgent needs for national defence or the livelihood of the people'. The 1954 constitution, in contrast, reserves no specific industries for public ownership and explicitly prohibits nationalization 'except in cases determined by law to meet urgent necessities of national defence or national economy'.[40] The change is probably not explained by ideological conversion so much as by the winnowing of war ; South Koreans of socialist persuasion who survived the war either went north or kept quiet. Thus the Korean War added ideological homogeneity to an already culturally homogeneous population and significantly narrowed the range of economic dialogue.

At the end of the Korean War most of the property was still in the hands of the government, including 90 percent of all industrial plant. By law, the vested interests were divided into four groups. Firstly, the public utilities and monopolies (ginseng, tobacco, salt) directly under ministers and departments. Secondly, five public corporations either government-owned or with the government holding a controlling share, i.e. the mint, the Bank of Korea, the Daehan Coal Corporation, the Korean Shipping Corporation, and the Daehan Shipbuilding Corporation. Thirdly, the so-called 'central' vested properties, including the tungsten mining company, the electric power corporations, irrigation concerns, and various other fairly large industries, all subject to overall control by one of the ministries. Finally, the 'local' vested properties, which it was decided to sell to local entrepreneurs. Most of the last named, including all cotton textile factories, were indeed disposed of in 1954.[41]

What characterized all these PEs was that they had not operated on a commercial basis. The National Assembly was given the responsibility for fixing the rates and charges for services and products. Moreover, the managers tended to be appointed for political reasons. The assembly's refusal to allow the enterprises to charge anything like realistic rates meant that they ran at heavy losses and had to be subsidized. The extent of the subsidies was frequently concealed because they sometimes took the form of selling aid imports to these enterprises below cost, and because some accounts were never published. Certain main industries such as coal mining and shipping figured in the budget in so far as government grants were concerned, but others, though frequently aided by government-guaranteed bank loans, did not appear in the budget at all.[42]

The pricing policy for coal was a highly controversial issue. Until the end of the Rhee government only privately owned mines were permitted to sell at open market prices, whereas the public sector mines had to sell at controlled prices and appreciably below cost. The public sector mines were further handicapped by the fact that some important end-users of their coal, notably the government-owned Korean Electric Power Company failed to keep up regular payments for it.[43]

The economic strategy of the Rhee Government was to maximize foreign aid, overvalue the currency, meet the government deficit by printing money and bonds, keep interest rates low, and focus on import substitution for economic growth. The result was inflation, speculation in land and goods, and discouragement of saving and investment. The approaching political crisis inhibited and distorted the economy, at the same time that foreign aid was being reduced in response to domestic U.S. pressures. Resultant popular frustration at the lack of economic progress was a contributing factor in the April Student Revolution in 1960.

The brief ensuing Chang Myon period (1960-61) was a product of social, political, and economic demands that had forcefully been held in check under Rhee. Allowed free rein, labour and student demonstrations severely restricted the capacity of the administration to govern and further unsettled the economy.

Under these circumstances, it is not surprising that the government was unable to manage PEs effectively. A somewhat extreme statement, tainted by self-interest but, nonetheless, reflective of the situation, was made by

Park:

> Operation of the state-run enterprises is convincing proof of the corruption of greedy former politicians, before whom the jackpot was thrown like a rabbit flung before the starved lion. They appointed their own managers. In other words, they appointed their own subordinates and received from them certain tributes. There was not one trace of economic reconstruction. Every time the government changed, state-run enterprises became a market place. Many scandals which cannot be condoned occurred. Comedy and tragedy were publicly repeated. The people have experienced these scandals themselves and I will not say any more.[44]

4. Planning under the Park Government

One of the outstanding features of Korea's economic development is the leading role that government has allocated to itself. Though Korea's economy is often described as a free market one, governmental intervention in its working can be seen easily, and the public sector has been sizeable. Private enterprise has been encouraged and supported, but on the understanding that it accepted official guidelines and supervision. It is generally recognized that full-fledged industrialization by this pattern did not start until 1962 when the First Five-Year Economic Development Plan was initiated by the Park Government.

Following the seizure of power through a coup d'etat in 1961, General Park and his military associates were in desperate need of a policy to ensure the regime's legitimacy and one of the shortcuts to attain this was through rapid economic growth. Thus, the Park Government put forward the economic well-being of the nation as the overriding common good. In the name of the nation, it tried to produce economic dynamism by state initiative. The dominant position of the state in the accumulation process was expressed by the concept of guided capitalism; 'the principles of free enterprise will be observed, but in which the government will either directly participate in or indirectly render guidance to the basic industries and other important fields'.[45]

This guided capitalism was to ensure a strong government hand in the basically market-oriented economy, involving planned economic growth, government guidance and participation. It was through these sorts of policy and concerted efforts that Korea achieved almost unprecedented economic growth during the two decades under Park. The GNP growth rate averaged around 10 percent per annum until 1980.[46]

An interesting fact here is that the Park Government adopted guided capitalism from the Japanese development experience. The Japanese model is highlighted by the state's careful guidance of outward-looking development in an indicative planning method. Park and his associates wished to create another economic miracle in Asia by emulating the Japanese model of capitalist development.

There were two factors behind this attempt. Firstly, the senior members of the regime, including Park himself, had had Japanese military or bureaucratic training.[47] They were not only familiar with the Japanese model of development but also favoured it. Secondly, recognizing similar socio-cultural traditions, they considered state guidance to be essential to the promotion of outward-looking development.

Rather than promoting laissez-faire capitalism, the Park Government turned to guided capitalism aimed at central control of the economy. The inner workings of guided capitalism were reflected in and integrated into the development planning, and it is widely held that Korea's rapid economic growth was greatly aided by its successful development planning. The consecutively planned and implemented five-year development plans were the government's main policy tool in coordinating the whole system. It is therefore worthwhile to review development planning in Korea with regard to its institutional framework and policy implications on PEs.

The first efforts at planning in Korea were begun during the Korean War by the foreign assistance agencies that were trying to assess the best patterns and the potential costs of rehabilitating the economy. The main result of this work was a programme prepared by Robert Nathan for the United Nations Korean Reconstruction

Agency. This programme was never formally adopted or even recognized by the Rhee Government, mainly for political reasons. President Rhee was preoccupied with political problems and his yearning for reunification was carried to the extreme that there was an unwillingness to build up the south as an independent and integrated economy. The possibility that unification would again give access to the electric power and heavy industries of the north was given as a reason for holding up the growth of such facilities in the south.[48]

Nonetheless, because no other similar planning work was undertaken for several years, the Nathan Plan provided the only overall perspective of the Korean economy's possible growth path during the rehabilitation period. Eventually in 1958 a second planning effort was initiated by the newly established Economic Development Council of the Korean government. This was to be a seven-year plan which would be divided into a three-year and a four-year phase. The plan for the first phase, covering the years 1960-62, was formulated in 1959 and approved by the cabinet in January 1960. Three months later the Rhee Government was overthrown and the plan was set aside. In the following year, a new five-year plan was prepared by the Economic Development Council, but it suffered the same fate as the three-year plan. The draft was completed just prior to the military coup of May 1961, and was not acceptable to the new government which assumed power after the coup.[49]

As soon as the military government assumed power, it announced its intention to launch a five-year plan beginning in 1962. At the same time, the government introduced various institutional changes necessary for effective decision-making. The primary goal of the Park Government was an acceleration of economic growth. Park proclaimed:

> In order to ensure efforts to improve the living conditions of the people in Asia, even undemocratic emergency measures may be necessary... It is also an undeniable fact that the people of Asia today fear starvation and poverty more than the oppressive duties thrust upon them by totalitarianism... In other words, the Asian peoples want to obtain economic equality first and build a more equitable political machinery afterwards... The gem without lustre called democracy is meaningless to people suffering from starvation and despair.[50]

A major step towards assembling the necessary government machinery took place in 1961 with the establishment of the Economic Planning Board (EPB) centred on economic policy-making. The Board took over planning responsibility from the recently established Ministry of Reconstruction and absorbed the Bureau of Budget from the Ministry of Finance, and the Bureau of Statistics from the Ministry of Home Affairs. Since it was the Bureau of Budget rather than the Ministry of Finance that monitored public expenditures, including development expenditures, the EPB was at the centre not only of medium-term planning but also short-term planning and policy-making. The head of the EPB was given the title of Deputy Prime Minister. This elevated position signified the seriousness of the planning intentions, and the EPB was expected to play a prominent role among the various economic ministries. The government also established the Central Economic Committee, consisting of the Prime Minister as chairman, the Deputy Prime Minister as vice-chairman, all the ministers concerned with economic affairs, and a few outside experts. Finally, the overall plans and regulations were coordinated on a before-and-after basis by the Economy and Science Council under the direct leadership of the President.

The First Five-Year Plan (1962-66), as finally published in December 1961, is one of the most interesting documents in Korean economic history. Its tone and policy recommendations largely reflect the thinking of the newly elevated young economists and other development-oriented bureaucrats and intellectuals. The plan drew heavily on a three-year plan proposal drawn up with the help of the same young economists and intellectuals under the Rhee Government, but that government had left it unacted upon for over a year. The plan emphasized the need for infrastructure development and declared that the government's economic strategy lay in industrialization through exports[51]:

> The ultimate course of the Korean economy lies in industrialization. During the planning period, the period of preparation for industrialization, emphasis will be placed on the development of power, coal, and other energy sources... expansion of key industrial facilities and adequate provision of social overhead capital, utilization of idle resources... primarily through increased exports, and technological advancement.[52]

On the management of PEs, the plan stated that, 'For the purpose of mobilizing the investment resources to the utmost, the management of the enterprises owned or controlled by the government should be rationalized.'[53] The plan was not specific on how this was to be achieved, but noted that government enterprises had been 'irresponsibly and irrationally managed and wasted huge amounts of public property.' The plan stated that these enterprises had been guilty of providing political funds to previous governments and of 'rampant nepotism'.

The February 1964 revision of the plan was much more specific in stating that 'the investment resources for the expansion of such government-run or controlled projects as the railways, communications and electricity must be financed within the relevant corporations themselves by means of management rationalization and the upward adjustment of public utility charges'.[54] Public utilities and other PEs had previously been forced to hold down their prices on the grounds that their increases would result in upward adjustments of other prices, ignoring the inflationary effect of this policy on the government budget and money supply.

The plan also called for more extensive use of banking institutions, and subsequent measures to improve banking institutions was undertaken. The Medium and Small Industry Bank was established in 1961, and two separate institutions, the Agricultural Bank and the Farm Cooperatives Association, were merged into a single organization, the National Agricultural Cooperative Federation. This latter move meant that the roughly 17,000 local cooperative offices throughout the country also became bank offices. In February 1962 the National Citizens Bank was founded by consolidating the 'mujin' (private money market savings and loan associations) in order to create a modernized bank to accept deposits from and make loans to lower and middle-income households and small retail and other businesses.[55]

Economic Decision-making

Given the Park Government's strong commitment to the achievement of economic development, the bureaucracy provided all possible administrative measures to implement plans. With the President at the helm, the administration dominated the legislative and judiciary branches as far as economic development was concerned. Economic policies were given top priority under this bureaucratic arrangement. The well-disciplined technocratic and bureaucratic elites in the state apparatus carried out policies with strong administrative power. Song aptly describes the situation at that time:

> In the 1960s many government offices, including the economic ministries, were staffed by retired army generals and colonels. Because the President himself was a retired army general, Korea's economic decision-making process was very close to a 'General Headquarters' style, in which the President himself made all major decisions and settled policy disputes among his senior officials. Many Koreans complained that Korean economic policy in the 1960s was managed by command.[56]

The highly centralized decision-making process obviously facilitated speed and flexibility in policy formulation with some advantages and some disadvantages. One example of how the process worked is provided by the Korean reaction to the oil crisis of October 1973. It required perhaps more than a month for the full implications of the situation to sink in but the president's secretariat began an intensive effort to produce a policy response. After consultation with a minimum number of experts, a sophisticated document was produced that led to a presidential emergency decree issued in January 1974, about three weeks after the study began. This became the centrepiece of energy policy.[57] Speedy decision-making also has its costs. Major adverse effects or better alternatives are often found after a new policy had been announced.

Thus the government took a leading role in mapping out the general direction of the economy in the form of five-year plans, but their actual implementation could not but be left to a mixed bag of public and private enterprises. It is obvious that the PEs were more responsive to the command of the government in the execution of the plans. The Park Government, however, showed no hesitation in devising means to influence enterprises even in the private sector. In 1962, for example, the Ministry of Commerce and Industry began setting annual export targets classified by commodity, region, and country of destination and monitored the performance of firms in approaching these targets. The government established or expanded a variety of special-purpose public enterprises to support this end. The best known of these is the Korea Trade Promotion Corporation.

The pattern of government-business relationships under Park was set in the first few months of the government when it announced a plan to confiscate fortunes from the so-called illicit fortune makers and implemented a special law for dealing with this. Under its provisions many of the country's leading businessmen were arrested and threatened with confiscation of their assets. Soon thereafter, ten of the leaders were summoned to a meeting with Park. A deal was struck whereby the government would exempt most businessmen from criminal prosecution; with the notable exception of commercial bank shares, existing assets would not be confiscated and businessmen would instead pay off their assessed obligations by establishing new basic industrial firms and donating a share to the government.

In the event, few new firms were established, and most of the delinquents paid fines in cash. But Park was interested in more than punishment; he was eager to enlist business support for the growth policies of the new government. Since these early years, government-business relations have mellowed and the advice of business associations has been listened to. It was largely on the basis of business recommendations that the industrial port at Ulsan was established and an association that evolved into the Federation of Korean Industries was created. Still, in this relationship, the government clearly had the whip hand.[58]

Although the relations of government and business were probably closer in export promotion than in other areas, the government's hand has been felt in all activities of large-scale enterprise. The most potent instruments for implementing economic policy have undoubtedly been control of bank credit and access to foreign borrowers. These instruments involve the manipulation of incentives on a presumably non-discriminatory basis but, in fact, involve a considerable element of administrative discretion.

Credit is the lifeblood of business enterprise everywhere, but it is particularly critical in Korea where the debt-equity ratios in manufacturing had been in the range of three or four to one in the first half of the 1970s. Over the entire period from 1963 to 1974, only 14 percent of cash flows of manufacturing corporations came from new equity. Another 20 percent was generated internally, but two-thirds came from borrowing. Of the borrowing, 53 percent came from domestic banks and financial institutions, 29 percent from foreign sources, and 19 percent from miscellaneous sources, including unofficial money markets.[59]

Since the commercial banks and other financial institutions that undertake corporate financing are PEs, the heavy borrowing of Korean companies gives the government and PEs substantial influence over the private sector. This influence became even greater because borrowing from abroad can only be undertaken with government authorization.

1. In the 14th century the Korean Alphabet was invented, movable metal type was developed, and encyclopedia and histories were written.

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5. McCune, p.13.

6. M. Deuchler, Confucian Gentlemen and Barbarian Envoys: The Opening of Korea, 1875-1885 (Seattle: University of Washington Press, 1977), p.225.

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13. Results of Three Years' Administration of Chosen since Annexation, Government-General of Chosen, 1914, appendices, pp.1-5.

14. H.J. Choe and T.H. Choe, Korean Economic History (Seoul: Pakyongsa, 1966), Korean, p.261.

15. McCune, p.30.

16. C.R. Frank,Jr., Foreign Trade Regimes and Economic Development: South Korea (New York: Columbia University Press, 1975), p.6.

17. McNamara, p.41.

18. M.C. Curtis (ed), Introduction to Comparative Government (New York: Harper Collins, 1990), p.313.

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20. Government General of Tyosen, Annual Report on Administration of Tyosen: 1936-37 (Keizo: Government General, 1937), p.56, 59.

21. H.C. Choi, The Economic History of Korea (Seoul: Samsung, 1971), pp.301-4.

22. McNamara, p.41.

23. McNamara, p.41.

24. McNamara, p.41.

25. McNamara, p.42.

26. Korea's relations with Japan are still bitterly poisoned by the memory of Japanese colonialism. In 1965, 20 years after the attainment of Korean independence, the Park Government and Japan negotiated an agreement that normalized relations despite strong opposition. Bad feelings are perpetuated by continuing reports of discrimination against the Korean minority in Japan and the Japanese textbook controversy over the Japanese contribution to the colonial development.

27. M.G. Kang, 'The Modernization of Korea from the Historical Point of View,' Asiatic Research Bulletin vol.6, no.1 (March 1963), p.6.

28. McNamara, p.2.

29. S.C. Suh, Growth and Structural Changes in the Korean Economy, 1910-1940 (Cambridge: Harvard University Press, 1978), pp.170-1.

30. McCune, p.140.

31. Frank, p.7.

32. D.S. Macdonald, The Koreans: Contemporary Politics and Society (London: Westview, 1988), p.184.

33. Brown, p.32.

34. Macdonald, The Koreans, p.185.

35. Brown, pp.38-9.

36. Brown, p.35.

37. D.S. Macdonald, 'Korea and the Ballot', vol.1, p.418.

38. I. Sakong, 'Macroeconomic Aspects of the Public Enterprise Sector' in C.K. Park (ed), Macroeconomic and Industrial Development in Korea (Seoul: Korea Development Institute, 1980), p.103.

39. E.G. Meade, American Military Government in Korea (New York: Columbia University Press, 1951), p.210.

40. 'The Constitution of the Republic of Korea', 1948, amended until 1987, Article 126.

41. W.D. Reeve, The Republic of Korea: a political and economic study (Westport: Greenwood, 1963), p.128.

42. Reeve, p.128.

43. Reeve, pp.132-3.

44. C.H. Park, The Country, the Revolution and I (Seoul: Hollym, 1970), p.47.

45. Summary of the First Five-Year Economic Plan, 1962-66 (Republic of Korea, 1962), p.28.

46. K.D. Kim, Rethinking Development: Theories and Experience (Seoul: Seoul National University Press, 1985), pp.196-7.

47. Park was trained at the Japanese military academy in Manchuria in 1940-42 and then served in the Japanese Kwangtung Army as Lieutenant Okamoto Minoru. C. Hamilton, Capitalist Industrialization in Korea (Boulder: Westview Press, 1986), p.27.

48. D.C. Cole and P.N. Lyman, Korean Development: The Interplay of Politics and Economics (Cambridge: Harvard University Press, 1971), p.27.

49. I. Adelman (ed), Practical Approaches to Development Planning: Korea's second five-year plan (Baltimore: Johns Hopkins University Press, 1969), p.11-2.

50. C.H. Park, Our Nation's Path (Seoul, 1970), pp.39-40.

51. Many LDCs tried to achieve industrialization through increased exports in the 1960s. According to Little, unlike many other countries, Korea and Taiwan succeeded in phenomenal growth of exports mainly by a policy that combined selective protection of certain import competing sectors with a virtual free-trade regime for exporters at world market prices, while the effective exchange rate for exporters was close to that which would have ruled under free trade. I.M.D. Little, Economic Development: Theory, Policy, and International Relations (New York: Basic Books, 1982), p.141.

52. Summary of FFYP, p.29.

53. Korean text of FFYP, p.23.

54. EPB, Complementary Plan of FFYP, 1964, p.22.

55. Brown, p.49.

56. B.N. Song, The Rise of the Korean Economy (Oxford: Oxford University Press, 1990), p.140.

57. E.S. Mason and others, The Economic and Social Modernization of the Republic of Korea (Cambridge: Harvard University Press, 1980), p.261.

58. Mason, pp.262-3.

59. Mason, pp.267-80.

CHAPTER IV

THE CONTRIBUTION OF PUBLIC ENTERPRISES TO KOREA'S ECONOMIC GROWTH

Of the many factors that have contributed to Korea's economic development, one cannot underestimate the role of the PE sector. The late President Park was the principal architect of this pattern of development. The Park Government's strong commitment to economic growth resulted in more active state involvement in the economic field. The economic policy was essentially pragmatic in the sense that the choice of means was determined by the ends to be achieved without significant ideological predilection. One indication is the degree of dependence on PE in an economy that proclaims the virtues of private initiative and the free market. The PE sector produced 9 percent of GDP or 13 percent of non-agricultural GDP in 1972. This is a rather high level, being similar to that of India on the basis of non-agricultural GDP and larger than that of Italy or the United Kingdom in the late 1960s despite substantial socialist advocacy in all three countries at that time.

Knowledgeable observers are prone to explain the large PE sector in terms of the Japanese colonial heritage. At best this is a partial truth. The sector grew in absolute and relative terms during the rapid growth period from the early 1960s. Of the 36 enterprises in the sector as of the end of 1960, over three-quarters were directly traceable to activities run by the Japanese colonial government or confiscated from private Japanese firms. The number of PEs increased to more than 120 in 1979. The expansion of PEs after the sixties was response to the inherent characteristics of economic development in Korea.

The average annual growth rate of value added in the PE sector was 14.5 percent as against 9.5 percent for the economy as a whole and 12.2 percent for the non-agricultural economy from 1963 to 1972.[1] The new PEs established under the Park Government accounted for most of the increase in the relative size of the sector. It is thus misleading to view the current size of the sector as a passive residue of the colonial era. The sector's share of GDP value added and its origin is shown in Table 4-1. It should be noted that the sector's GDP and non-agricultural GDP share rose to 10.4 percent and 11.9 percent respectively in 1986.

Table 4-1 PEs' Value Added as Percentage of GDP

	1963	1970	1977
(1) As % of GDP	6.7	9.2	8.0
(2) As % of non-agr. GDP	12.4	13.0	10.6
(3) Origin by sector			
Agr. & Fishing	1.8	1.2	0
Mining	8.8	3.0	3.2
Manufacturing	30.2	39.2	39.5
Electricity & Gas	12.3	13.8	17.5
Construction	1.8	2.2	3.9
Wholesale & Retail	3.0	1.6	0.9
Transportation & Storage	26.5	21.6	14.5
Banking & Insurance	15.4	16.2	18.1
Public Utlties & Service	0.2	1.2	2.4
Total	100.0	100.0	100.0

Source: KDI, Han'guk kaebal yŏngu [The Korea Development Review], vol.3, no.1, 1981.

In comparison, however, these figures are considerably lower than those for Taiwan and Brazil, where the government has engaged more deeply in the public sector. For example, Taiwanese PEs generated 22.1 percent of GDP in 1976; Brazilian PEs yielded 20 percent of the net worth of the entire manufacturing sector in 1974.[2] The state played a much stronger entrepreneurial role in Taiwan and Brazil than in Korea.

The contribution of the PE sector to growth is not measured simply by the level of output but also by strategic importance. The areas of activity in the sector are more comprehensively illustrated in Table 4-2. Of the 10 categories, the sector was an important factor in five. It accounted for seven-eighths of value added in finance; for two-thirds of electricity, water, and sanitation; for slightly less than one-third both in mining and in transport and communications; and for 15 percent of manufacturing. Although a large number of PEs are engaged in providing physical facilities, most of the actual work is contracted out so that the sector accounted for only 5 percent of value added in construction. In terms of absolute size, the manufacturing sector accounted for one-third of PE value added, with finance, transport and communications each contributing a fifth, and electricity a further 14 percent.

Table 4-2 Industrial Origin of PE Value Added, 1972

	Share of PE in Industry (%)	Share of Industry in PE Total (%)
Agriculture, Forestry, & Fishing	0.20	0.68
Mining	31.01	3.63
Manufacturing	15.11	34.92
Construction	5.44	2.98
Electricity, Water, & Sanitation	66.19	13.66
Transport & Communications	30.51	18.95
Trade	2.35	4.10
Finance	86.95	19.28
Ownership of Dwellings	0.40	0.09
Services	1.70	1.72
TOTAL	9.07	100.01

Source: L.P. Jones, Public Enterprise, 1975, p.76.

The above discussion suggests that the Korean PE sector achieved a remarkable growth during the 1960s and 1970s and this was made in the country's strategically important areas. In order to further analyze the sector's role in credit rationing, infrastructure and the development of heavy industries, it will be useful to look at some economic characteristics and intervention motives of the sector.

1. Some Economic Characteristics and Intervention Motives

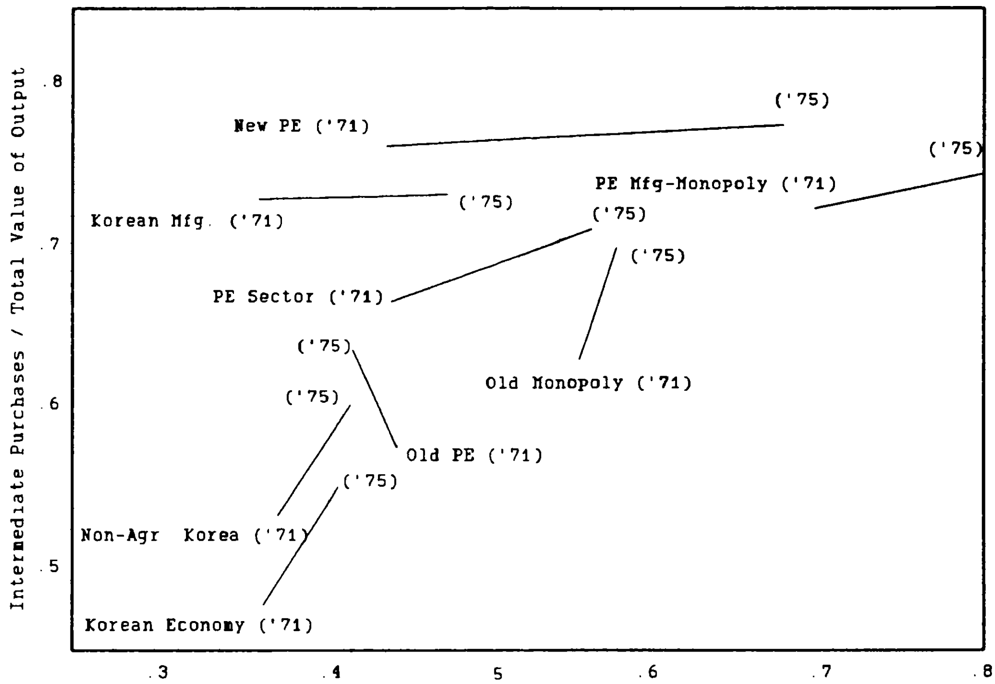
The structural role may be further analyzed by looking at some economic characteristics of the sector. Firstly, the issue of production interdependence is worth mentioning. PEs in general have high production interdependence or externalities. This factor of externalities is one of the main reasons for governments to undertake PEs, even when some of them do not show any surpluses.[3] The full contribution of such sectors can be calculated when their role in stimulating other economic activities is considered. In other words, we should try to find out what the influence of an industry or a particular sector on the growth of the economy is, and, if such calculations are possible, the sector under consideration should have a multiplier effect on the growth of the economy. One of the tools that can enhance such an understanding and also provide some measure of the role of a particular sector in the economy is production interdependence.

The economy functions as a interdependent chain system of industries in that an output of industry A can be used as an input of industry B, whose output can again be used as an input of industry C. The more sophisticated the economy, the deeper will be the industrial interdependency. Industrial interdependency can be measured by the Chenery-Watanabe method. Input interdependence is defined as the ratio of total intermediate goods purchased to the total output produced. In the same manner, output interdependence is defined as the ratio of total intermediate goods sold to total output. Here only the direct effect is counted.[4]

The production interdependence measured by the Chenery-Watanabe method is deficient in not considering the indirect effect and in not distinguishing domestic effects from those operating on foreign economies. To overcome these defects, Jones suggests the calculation of both forward and backward linkage effects. In his method, output interdependence and input interdependence are substituted by forward linkage and backward linkage respectively. The production interdependence relationships for the Korean economy and the PE sector in 1971 and 1975 are summarized in Figure 4-1, using the Chenery-Watanabe method. The PE sector in both years shows a higher input and output interdependence compared to that of the Korean economy as a whole or the non-agricultural economy. The PE manufacturing sector in both years demonstrates about the same degree of input interdependence but a much higher output interdependence. This means that the sector is more oriented towards accommodating other industries with its outputs. One other aspect noticeable from the figure is that the sector became more interdependent in both output and input markets in 1975. This partly reflects the fact that the Korean economy experienced a rapid structural transformation during the sample period.

Figure 4-1 PE Sector's Interdependence in Production

(Intermediate Sales / Total Value of Sales)



Note: new public enterprise means one established since 1961.

Source: I. Sakong, 'Macroeconomic Aspects of The Public Enterprise Sector' in C.K. Park (ed), Macroeconomic and Industrial Development in Korea (Seoul: Korea Development Institute, 1980), p.110.

Thus, industries with high production interdependence may have a greater adverse impact on other productive sectors. But, since PE goods and services are usually priced to cover costs and yield a profit in Korea, the private enterprises purchasing these goods and services are not indirectly subsidized, as frequently happens in other economies with a large PE sector.

This point needs some explanation with regard to a fiscal policy change in the early years of the Park Government. Between 1962 and 1964 government spending was cut from 25 percent of GNP to only 11 percent in order to eliminate government deficits. Efforts to increase tax revenues in order to permit higher levels of government investment and spending within the limits of a balanced budget raised the constant price value of tax revenues by an average 25 percent per year between 1965 and 1971. Government saving had risen from minus 2 percent to plus 7 percent of GNP.[5] Prices of government enterprises were raised in the face of inflationary pressures in order to increase enterprise profits and savings. Internal savings were soon the major source for greatly increased levels of investment of these enterprises, compared with little or no profits and relatively little new investment in immediately prior years.

During the 1960s, the savings (profits plus depreciation) of the government enterprises (departmental) and Government-Invested Enterprises (GIEs) amounted to more than two-thirds of their own gross investment, with the remainder financed mostly from general government budget sources and by bank credit. Thus, these enterprises had financed from their own revenues most of the capital formation.[6] Although the savings of the PE sector as a proportion of their capital formation dropped in the 1980s,[7] this was in marked contrast with the experience of a number of countries where at least some PEs operate at substantial deficits, where significant sums of general government revenues must be used just to meet these deficits, and where new investment must be financed by yet larger government expenditure and by borrowing from the private sector.

The sector's second economic characteristic is capital intensity. The sector is more than three times as capital intensive as the Korean economy, and more than double Korean manufacturing. This means the sector tends to absorb a large fraction of total investment and a small fraction of total employment. In the late 1960s and early 1970s, the sector accounted for about 30 percent of total investment but only 5 or 6 percent of the increase in employment.

The third characteristic is output market concentration. In 1972, 76 percent of PE value added was in monopolistic or oligopolistic markets. At most, 10 percent of the value added by the sector was sold in reasonably competitive markets. This is confirmed in terms of the number of monopolistic PEs in 1987. Table 4-3 shows that all of the Government Enterprises (departmental), and more than 80 percent of GIEs and Subsidiary Companies of GIEs are monopolistic. Given this high correlation between PE and imperfect competition, what is the direction of causation? One possibility is that government uses its powers to protect its enterprises from competitive pressures. This is clearly the case with the Korea Monopoly Corporation, where the goal is straightforward revenue maximization. In virtually all other cases, however, enterprises may be interpreted to be in the public sector because they operated in imperfect markets rather than vice-versa.

Table 4-3 Degree of Monopoly in the PE sector, 1987

	Total Number (A)	Monopolistic (B)	% Ratio (B/A)
Government Enterprises	4	4	100.0
GIEs	26	21	80.8
Other Government-Backed Enterprises	6	5	83.3
Subsidiary Companies of GIEs	68	30	44.1
Local PEs	119	84	70.6
Total	223	144	64.6

Source: D.H. Song, Han'guk ŭi kongqiŏp kwanri chŏngch'aek [Public Enterprise Management Policy in Korea] (Seoul: Korea Development Institute, 1989), p.107.

Finally, public sector enterprises are generally import substituting. Direct and indirect sectoral imports substantially exceeded direct and indirect exports, yielding a sectoral trade deficit representing 11.7 percent of that of the economy as a whole. In sum, enterprises operating in the PE sector are characterized by high output interdependence, high capital intensity, large size, market concentration, and the production of import substitutes rather than exports.[8]

Given the characteristics of the enterprises in the public sector, the government's decision to intervene is not surprising. The degree of output market concentration alone would justify the intervention. The size of the sector is largely explicable as a pragmatic government's response to the various market imperfections that are virtually synonymous with low levels of economic development. Historical inertia and political predilection did affect the outcome, but to a lesser extent than in other developing countries. Various intervention motives in the Korean PE sector were surveyed by Jones. Based on his study, a set of intervention motives is given in Table 4-4.

Table 4-4 Intervention Motives, 1972

Motives	Forward Linkage	Backward Linkage	Capital Intensity	Share value Added
Basic Motives				0.42
- Natural Monopoly	2.13	1.59	15.64	0.34
- Collective Intermediates	1.07	1.82	1.54	0.04
- Merit goods	1.46	1.76	1.34	0.05
Developmental Motives				0.25
- Enterprenrl support	1.82	1.29	0.65	0.06
- Enterprenrl substitution	2.27	1.59	8.28	0.11
- Managerial substitution	1.73	1.77	4.26	0.04
- Transitional	2.06	1.83	23.95	0.04
Other Motives				0.33
- Power & control	2.44	1.79	0.96	0.12
- Revenue	1.11	1.63	1.64	0.21

Source: L.P. Jones, Public Enterprise, 1975, p.147.

The table assigns each enterprise to a single primary intervention category. Three basic groups are distinguished. The first, termed 'basic motives' includes productive activities that provide public intervention in one form or another in virtually all economies. This group includes the natural monopolies and producers of collective intermediates and marketed merit goods. The second group, called 'developmental motives' includes reasons common to the developing economies. These all arise from a constellation of market failures involving entrepreneurial inadequacies, imperfect capital markets, shortages of information, and unwillingness to bear risk. The third group is a heterogeneous class of other motives including power, control, and revenue. Basic motives accounted for 42 percent of 1972 PE value added, developmental motives for 25 percent, and other motives for 33 percent.

A look at individual categories reveals that natural monopolies are characterized by very high forward linkages, but modest backward linkages. They are related to development in that their expansion is necessary if bottlenecks are to be avoided. Collective intermediates and merit goods have very low forward linkages, modest backward linkages, and low capital intensity. Their provision is not directly related to economic growth, but rather a component of broader social development. The first two developmental motives deal with activities that are judged to be potentially profitable from a purely private point of view, but that the private sector will not undertake independently because of the magnitude of capital requirements, risk, uncertainty, technological complexity, lack of market knowledge, and so on. To compensate for this entrepreneurial failure, government may either provide technical assistance, or subsidized credit through entrepreneurial support organizations, or it may itself initiate the activity taking the role of entrepreneurial substitute. The third developmental category is termed 'managerial substitution'. It refers to cases where the private sector initiated actively, usually with the help of a supporting PE, but then failed in the operational phase resulting in a threat of bankruptcy.

It seems fair to say that the government did not seek to compete with the private sector, but rather to undertake new industrial investments only when necessary either to avoid creating a powerful private monopoly or to introduce a large-scale activity where private capital was not available or able to do the job, at least not without very large-scale government financial support.

The 'power and control' motive category is primarily composed of state-owned special banks and other financial intermediaries. A purely economic rationale for intervention in these entities' activities follows from the disequilibrium interest rate system, the opportunities for profit sharing, and the resultant necessity for close control over the temptations provided to bank officials.[9] A much more important reason, however, is a desire by the Park Government to control private concentrations of economic power. Control of the banks was a central element of the Japanese zaibatsu[10] power, and keeping the banks in public hands is a potent constraint on similar developments in Korea.

2. Financial Public Enterprises' Role: Credit Rationing

In Korea, the government's control of the financial system was an integral part of the government-led economic development. Korea's financial sector played a significant role in this development by mobilizing domestic savings for capital formation. Yet the more significant aspect of the banks' role during the decades of economic growth was to serve as the major source of government-directed loans to Korean businesses, thereby giving the government a powerful means of control over the private sector.

Two major financial developments before 1961 deserve attention. The first was the privatization of commercial banks that had previously been nationalized in the process of divesting Japanese interests. The government shares of commercial banks were put on the block beginning in 1954 and on a massive scale in 1957. The auctions were conducted in such a fashion that the result was the high concentration of stock in a few hands. The second development worthy of mention was the establishment in 1959 of the Bank of Seoul as a bank exclusively funded with private capital. The Bank of Seoul was the first new entry into commercial banking since liberation.

As Park came to power in 1961, the strengthened control of the government over the financial sector is most evident in its relationship to the central bank and the Monetary Board. In May 1962, the Bank of Korea Act was amended and the Board was renamed the Monetary Management Board. This titular change was interpreted as an expression of the government's intention to downgrade the function of the board from policy deliberation to policy management discussion.[11] At the same time, the Board's membership was expanded to nine by adding two appointed members to the existing seven. The power of the Finance Minister was strengthened; the Minister could request that the Board reconsider a resolution previously passed. If the request was overruled by the Board with a two-thirds majority, the final decision would be made at a cabinet meeting, at which the Minister's view would be ensured a hearing. As final proof of its subordination, the central bank was made subject to examination by the Finance Minister at least once a year, and its annual budget was to be approved by the cabinet.

In addition, those commercial banks privatized in the late 1950s were once again nationalized as a result of confiscating 'illicit' wealth accumulated under the previous regime immediately after the military coup. Furthermore, the voting rights of private shareholders were restricted to a maximum 10 percent by the Provisional Law on Financial Institutions. The annual budgets of commercial banks were made subject to the approval of the Finance Minister, although there was neither binding stature nor legislated rule to that effect. The case was the same with the top management of commercial banks.[12] Their organizational structures were made identical. In essence, the presence of the government was felt in commercial banks almost to the same extent as in special banks and the role of banks was to be that of credit-rationing outlets at the command of the government.

Financial institutions in Korea can be classified into the central bank (Bank of Korea) and two other broad categories - banking institutions and non-bank financial institutions. Non-bank financial institutions were insignificant until the mid-1970s. Banking institutions comprise commercial banks and specialized banks. The former category is composed of 7 nationwide banks, 10 local banks, and 55 foreign bank branches (as of the end of 1987); the latter includes the Korea Exchange Bank, the Small and Medium Industry Bank, the Citizen's National Bank, the Korea Housing Bank, the National Agricultural Cooperatives Federation, the National

Federation of Fisheries Cooperatives, and the National Livestock Cooperatives Federation. The Korea Development Bank, the Export-Import Bank of Korea, and the Korea Long-Term Credit Bank are also specialized banks, in that they were established under special laws, but they are classified functionally as non-banks, because their primary source of funds is not deposits but issuance of debentures, borrowing, and so on.

A significant role in financing industrialization was played by the special banks. They were established mostly during the 1960s in order to provide intermediate and long-term credit to meet the demands for funds from key industries or strategic sectors which commercial banks alone could not adequately supply. As PEs they are owned, directed, and supervised by the government and, in principle, are outside the purview of the Monetary Board.

The Korea Development Bank was founded in 1954 to supply long-term credit for key industries. In the latter half of the 1950s the bank contributed to the rehabilitation of industrial facilities destroyed during the Korean War. The bank was reoriented to finance major development projects in line with the First Five-Year Economic Development Plan. The Small and Medium Industry Bank was established in 1961 to reinforce financial support for small and medium-sized firms. A number of mutual finance companies were consolidated into the

Citizen's National Bank of Korea in 1962; a year later this was reorganized as the Citizen's National Bank. This bank was to specialize in small loans to small-sized firms with poor credit standing as well as to households. The National Agricultural Cooperative Federation was reorganized in 1961 via the merger of the former Agricultural Cooperatives and the Agriculture Bank. Similarly, the National Federation of Fisheries Cooperatives was established in 1962 to meet the financial needs of fishers and fisheries manufacturers.

The hectic year for establishing specialized banks was 1967. Firstly, the Korea Exchange Bank was established with the specific task of supporting foreign exchange transactions for firms. The need for a bank specializing in this field had increased with the rapid growth of foreign trade volume. Secondly, the Korea Housing Bank was founded to finance housing for low-income households. A third bank established in 1967 was the Korea Long Term Credit Bank (reorganized from the Korea Development Finance Corporation). It was empowered to extend medium and long-term credit to firms in the form of loans, discounts, equity investments, and guarantees. This bank is unique, in that it is a privately funded institution with specialized functions assigned to it. Booming exports necessitated the inauguration of the Export-Import Bank of Korea in 1969, with its capital funded by the government, the Bank of Korea, and the Korea Exchange Bank. Its main business is financing medium and long-term export-import transactions; investing overseas, including natural resources development projects abroad; underwriting export insurance for domestic corporations and foreign institutions; and extending credit to foreign buyers for importing capital goods and technical services from Korea.

During the rapid developmental period, special banks played an important role in the Korean banking system. By 1978, the special banks held 36.9 percent of assets, 30.6 percent of deposits, and 42.5 percent of loans held by all domestic banks.[13] Public ownership and control is dominant in banking institutions in Korea. Only local banks and the branches of foreign banks are truly private and they account for only 15 percent of the total bank loans and discounts. Because of the voting right restriction of private shareholders, the government or quasi-government authorities, holding about 30 percent of the shares in each of the nationwide commercial banks, has little difficulty in running these banks as it wishes. The heavy involvement of the government in the banking and financial sector was designed to facilitate the management of the economy. Moreover, the Park Government viewed control over the allocation of credit, both domestic and foreign, as an important element of economic and political policy. It resisted repeated advice to let interest rates and competition among independent financial institutions determine the allocation of credit. It was also claimed that the system invited bribery and misallocation of resources. Instead, the government has kept loan interest rates below equilibrium levels and has intervened pervasively in allocation decisions.

The Park Government used the financial system to provide incentives to exporters and to support those investments considered most conducive to industrialization. Exporters received automatic financing of raw material and production costs at low interest rates around 6 percent per annum. This financing, which often exceeded current needs, could be reloaned in part in the unauthorized money markets at 24-30 percent per annum, thus giving a healthy subsidy. Similarly, the foreign loans and even many of the loans of commercial banks carried interest rates that were low in nominal terms and often negative in real terms.[14]

The reasons for this were both economic and political: the credit instruments could be used to mobilize businessmen for major economic programmes such as export promotion or the development of the machinery and petrochemical industries, while on the political side they served to maintain control over, and cooperation from, the business community. Most of the Korean businessmen might have been aware of the need to stay on good terms with the government to assure continuing access to credit and to avoid harassment from the tax officials. Although the state banks had not acquired any greater degree of independence in decision-making as to the allocation of credit, since decisions on all the guarantees and many of the larger loans were made by the government, they did at least have a greatly expanded managerial role over a system that exerted a major influence on the allocation of resources.

3. Infrastructure Development

In pursuing an outward-looking development policy, the initial difficulty facing the Park Government was mobilizing capital for financing industrialization. A large reserve of labour force with relatively good education and skills could provide a base for the establishment of labour-intensive industries, but an acute shortage of capital was a major obstacle to that approach.[15] By 1963, neither the public sector nor the private sector was generating an investment surplus enough to finance new projects and industries. The national economy of Korea was dominated by US foreign aid, which financed more than 50 percent of total fixed capital formation in 1964 and 1965. The government had to seek foreign investment prior to generating domestic ability to mobilize capital.

The dependence of Korea's industrialization on foreign capital had been extremely high. During the first two Five-Year Economic Plans, for instance, foreign savings accounted for almost half of the total investment of Korea. The percentage began to drop in the early 1970s and the character of external capital changed rapidly, with major sources of capital shifting from grants to loans, from official to commercial loans, and from loans to direct investments.[16] Japanese capital, however, came to make up for the gradual reduction in American aid to Korea. The controversial Korea-Japan treaty of 1965 established a basic framework for the influx of Japanese capital. This resumption of diplomatic ties with Japan signalled the increasing influence of a Japanese role, in addition to the American role, in shaping the industrialization of Korea. Thus the US and Japan became the two dominant capitalist centres for Korea in its relations with the international economic and political system. During the phase of Korea's outward-looking development, these countries were the two principal capital suppliers and the trading partners. Their combined share was more than 48 percent in total capital inducement between 1962 and 1979 (Table 4-5). The US and Japanese security commitment also produced a favourable investment climate in Korea for international financial institutions.[17]

Table 4-5 Foreign Loans and Investment, 1962-79 (million US$)

	Public Loan	Commer-cial Loan	Direct Invest-ment	Total
USA	1,687	2,291	222	4,200
Japan	929	2,148	588	3,665
International Institutions	2,427	81	0	2,508
EC	506	2,843	146	3,495
Others	300	2,004	117	2,421
Total	5,849	9,367	1,073	16,289

Source: Economic Planning Board, Current Status of Foreign Capital Inducement, 1980.

In inducing foreign capital, the government gave priority to indirect over direct investment. Given the assumption that multinational activities would be disruptive to the nationalistic logic of capital accumulation, the state tried to exercise control over foreign presence by favouring loans over direct investment, since loans do not entail foreign control of the local firms. The government was reluctant to cooperate with multinationals until local industries reached a competitive stance in technological and capital capabilities vis-a-vis multinationals. It exercised its central role in the management of the economy by mandating a preferred role for foreign investment in the form of loans. Among the total of $16.2 billion of foreign investment between 1962 and 1979, the amount of public and commercial loans accounted for about 15 times that of direct investment.

There is little doubt that foreign investment was essential to Korea's industrialization. It stimulated domestic capital formation and improved management skills for the domestic economy. Above all, acquiring import-embodied technology was an important by-product. It accelerated domestic substitution of goods previously imported. Since there was industrial infrastructure consisting of people with technical and management skills and facilitating industries, the capacity to utilize import-embodied know-how was relatively high. Although an empirical study of technology transfer is not available, the presence of significant technical progress in the growing manufacturing sector may have been attributable to the considerable diffusion and application of the import-embodied technology.[18]

It is worth noting that foreign capital, however, was heavily concentrated in social infrastructure development. Of the total foreign loans of 2,545 million dollars induced from 1962 to 1970, 44 percent were allocated in social overhead capital.[19] This was attributed to the public loans from international financial institutions for the agricultural sector and a significant increase in the electricity and transportation sector. This implies that the lion's share of foreign loans was directed to PEs.

The PE sector consistently played a substantial role in fixed capital formation. Above all, they were extensively utilized as developmental agents in various infrastructure projects during the initial period of development. The result was remarkable. Per capita consumption of electricity increased from 87 kilowatt-hours in 1965 to 471 kilowatt-hours in 1975. Korea started to develop its nuclear generating capacity in the early 1970s, and the first nuclear plant was completed in 1977. The transport sector also grew rapidly. Freight and passenger traffic increased by about 12 to 13 percent a year in the 1965-75 period. Paved roads increased more than fivefold, and three-quarters of passenger traffic was by road. The share of the railways in freight and passenger traffic declined. Nevertheless about one-half of freight traffic, consisting mainly of long hauls of bulk commodities, still went by rail in 1975. Coastal shipping expanded rapidly between 1965 and 1970 and carried a stable volume of traffic after 1973. The cargo-handling capacity of well-developed ports, spaced at intervals of 200 kilometres or less along the coastline, rose from 15 million tons in 1967 to 31 million tons in 1975. With the growth of foreign trade, the gross tonnage of Korea's ocean-going fleet rose from 163,000 in 1965 to 2.2 million in 1975.[20]

Having been committed to rapid economic growth and modernization, it appeared quite natural to the military government that social infrastructure investment could spark an accelerated trend of private capital formation and output growth. For one, the military had managed transportation and communication facilities as well as a great deal of construction equipment since the outbreak of the Korean War; hence, the infrastructure sectors were the areas with which they felt familiar and expected to exercise direct control. Secondly, the lack of adequate social infrastructure such as power, transportation and communication facilities was thought to cause one of the serious bottlenecks to the future development of the economy. Furthermore, the growth of infrastructure facilities was believed to create new investment and sales opportunities for private business. In the framework of the usual multiplier-accelerator mechanism, it meant an injection of autonomous investment, spearheaded by the public sector, calling for magnified increases in the level of output and induced investment.[21] For this purpose, several new firms such as Korea Highway Corporation, and Korea Water Resources Development Corporation were added to the PE sector. Consequently, massive investments in electricity, gas, railways, highways and irrigation were made.

Over the 1962 to 1973 period, PEs generated slightly more than 10 percent of savings while absorbing about 30 percent of investment. In the years 1963-69, social overhead investment, including transportation, communications, construction, and public utilities, expanded at an annual average rate of 28 percent. Table 4-6 shows the PE sector's share of fixed capital formation in selected years since 1963.

Table 4-6 Sectoral Composition of Fixed Capital Formation

	1963	1970	1975	1980
PEs	31.7	18.9	33.2	27.6
Government	9.5	19.1	11.6	7.0
Incorprtd Busins	32.0	42.2	31.9	41.5
Individuals	26.8	19.8	23.3	23.9
Total	100.0	100.0	100.0	100.0

Source: Bank of Korea, Flow of Funds Accounts in Korea, each year.

As seen in the table, the PE sector consistently played a substantial role in fixed capital formation.

During the period from 1970 to 1975, a yearly average of 27.9 percent of the total national fixed capital formation was attributable to the sector.[22] Considering the sector's less than 10 percent GDP share and low level of savings (8.1 % of over-all gross savings, 1970-75), this shows the strategic importance of PEs as fixed investment agents.

4. Pioneering Heavy and Chemical Industries

Korea's export expansion strategy contributed significantly to the overall expansion of the economy. An estimate shows that export growth accounted for less than 10 percent of real GNP growth before 1960. Its contribution rose during the 1960s, reaching over 20 percent in the first half of the 1970s. By the latter half of that decade, about a third of national growth could be attributed to the expansion of exports. Exporting activities also contributed to the growth of technological capabilities. This reflects the positive effects of foreign competitive pressure on productivity and the fact that trade creates new channels for learning about and acquiring foreign technologies. The spectacular export performance led to increasing confidence in the Government's ability to initiate and direct national development strategy. Certainly the takeoff period demonstrated that a favourable macroeconomic framework, combined with aggressive export-prompting intervention could lead to rapid growth. Buoyed by its past success, the Government next turned to more direct efforts to accelerate structural change in order to promote heavy and chemical industries (HCIs).[23]

Despite intervention, there was little sectoral bias in the government's development strategy prior to the early 1970s. Although special laws promoting machinery and shipbuilding were adopted in 1967, and basic materials and intermediate goods were frequently mentioned as an objective, the First and Second Five-Year Plans identified labour-intensive exports as a high priority and the export imperative generally dominated government policy. The shift from general export promotion to a sectoral development strategy, focused on HCIs, was announced in 1973 by the late President Park.

This represented a major industrial policy change in favour of specific industrial targets and wide-ranging commitment by the government. This policy change had both political and economic roots. The opening of US relations with China and the fear of a possible withdrawal of American troops prompted the government to seek an industrial base for an independent defence effort. On the economic side, the objective of 'deepening industrial structure' was seen as a logical response to the rapidly rising domestic wage rate and increased global competition in some of Korea's export industries. The potential entry of China in world markets appeared to accelerate these trends. At the same time, Japanese penetration of global steel, electronics, and automobile markets provided a timely and successful model. Indeed, the government believed that the industrial structure needed upgrading and that the new directions required large-scale risky investments which would not be undertaken by private firms without decisive state initiative.[24]

The targeted industries included steel, machinery, shipbuilding, petrochemicals, and automobile production. These industries were to capture a substantially larger share of value added as well as account for more than 50 percent of Korean exports by 1980.

However, well before the HCI drive policy was announced, PEs were active in most of these industries. The strongest presence was in chemicals and steel. In the initial period, the government preferred to control such industries directly, bearing the risk of innovative investments. As these industries became better established and there was room for several enterprises, the government opened the way to private investors. One example of this sequence is found in fertilizers, where the state-owned Chungju Fertilizer Company made the initial investment. This costly facility took over 5 years to construct and to be put into effective operation. After a second state-owned plant was built, the government drew upon the experienced staffs of these two enterprises to establish two new joint ventures involving state-owned companies and foreign companies. Finally, a wholly private, domestic, and foreign joint venture was allowed to build the fifth fertilizer plant. This trend toward private investment was repeated in petroleum refining.[25]

Under the Rhee Government, refined oil was simply imported and there was little more than loose talk of the need for a refinery. At last one was completed in 1964, a few years after Park came to power. Located in the Ulsan estate, it was operated by the Korea Oil Corporation, a joint venture between the government and Gulf Oil. As demand grew, it was repeatedly expanded. Then, in 1969, a second refinery went on stream, a joint venture between Caltex and the Lucky Group called Honam. With demand growing further, Kyung In Energy was established by Union Oil and the Korea Explosives Group in 1971. In 1980, a fourth refinery was launched by the Ssangyong Group, with the National Iranian Oil Company.[26]

In 1972, state-owned fertilizer firms accounted for 72.2%, refinery firms 48.4%, metals 16.7%, and steel firms 11.0% of the domestic production.[27] Shipbuilding is one of the most rapidly developed HCIs since the 1970s. The PE sector also played a role in this industry since the state-owned Dae Han Shipbuilding Corporation took the lead in modern shipbuilding.

The Pohang Iron and Steel Company (POSCO), however, is the most appropriate example of PE's pioneering role in heavy industry. Korea faced several challenges in entering the steel business: integrated iron and steel-making is highly capital intensive, but she lacked capital. Costs are sensitive to scale, but Korea's domestic market was small and the largest nearby market, Japan, lodged the world's most efficient steel producer. Korea also lacked iron ore resources and steel-making skills. As is typical of many mature industries, the steel-making process is embodied in the equipment. Most of the technology can be imported from machinery suppliers and consultants. Nonetheless, the nature of the process necessitates complex engineering. The Park Government first tried to enter into steel-making in 1961, then again in 1962 and 1967 by negotiating foreign financial sources. All efforts collapsed in disagreement over scale. Finally, finance was forthcoming in the form of reparations from the Japanese government for 'years of hardship under Japanese rule'. The engineering consultant to POSCO was designated the 'Japan Group' and consisted mainly of Nippon Steel and Nippon Kokkan Steel. At last, in 1968, the government established POSCO as a GIE with $3.6 billion,[28] Korea's largest single investment until then; five years later POSCO began production in the southeast city of Pohang with an annual capacity of 1.03 million metric tons. After several expansions, the integrated iron and steel mill reached an annual capacity of 9.1 million metric tons of crude steel in 1983 and with the completion of its third-phase expansion project for the Kwangyang plant in 1990, it became the third largest steel maker in the world. The latest expansion pushed up POSCO's annual production capacity to 17.5 million tons, only behind Nippon Steel of Japan and Usinor Sacilor of France, and made Korea the sixth largest steel producing country in the world.[29]

About 20 years after its founding, POSCO became one of the lowest-cost steel-makers in the world.[30] An indicator of its progress was a joint venture POSCO entered into with United States Steel in 1986 for the purpose of modernizing the latter's Pittsburg, California plant. POSCO was to supply half of the capital requirements, provide some facilities, undertake basic design and train the American managers and workers. As steel is increasingly demanded by industries such as shipbuilding, automobiles, and construction, the founding of POSCO signalled Korea's turn to heavy industry.[31]

1. L.P. Jones and I. Sakong, *Government, Business, and Entrepreneurship in Economic Development: The Korean Case* (Cambridge, Massachusetts: Harvard University Press, 1980), p.148.

2. H.C. Lim, *Dependent Development in Korea, 1963-1979* (Seoul: Seoul National University Press, 1986), p.102.

3. M. Haririan, *State-Owned Enterprises in a Mixed Economy: Micro Versus Macro Economic Objectives* (Boulder: Westview Press, 1989), p.6.

4. D.H. Song, 'The Role of the Public Enterprise in Korean Economy,' in K.U. Lee (ed), *Industrial Development Policies and Issues* (Seoul: Korea Development Institute, 1986), p.194.

5. G.T. Brown, *Korean Pricing Policies and Economic Development in the 1960s* (Baltimore: Johns Hopkins University Press, 1973), p.1.

6. Brown, p.79.

7. The ratio dropped from 60 percent in 1971-1974 to 25 percent in the 1980-1981 period, possibly because of the rapid expansion of heavy industries in which the PE sector is particularly active. D. Mukerjee, *Lessons from Korea's Industrial Experience* (Kuala Lumpur: Institute of Strategic and International Studies, 1986), p.18.

8. Jones and Sakong, pp.151-5.

9. Jones and Sakong, pp.157-8.

10. Zaibatsu were large capitalist enterprises of Japan before World War II, similar to cartels or trusts but usually organized around a single family. One such organization might operate companies in nearly all important areas of economic activity. The Mitsui, for example, owned large investments in companies engaged in banking, foreign trade, mining, insurance, textiles, sugar, food processing, machinery, and many other fields as well. All zaibatsu owned banks, which they used as a means for mobilizing capital. *The New Encyclopedia Britannica* 1980 ed.

11. J.K. Kwon (ed), *Korean Economic Development* (New York: Greenwood, 1990), pp.186-7.

12. Kwon, pp.187-8.

13. Korea Exchange Bank, The Korean Economy (Seoul, 1978), p.166.

14. E.S. Mason and others, The Economic and Social Modernization of the Republic of Korea (Cambridge, Massachusetts: Harvard University Press, 1980), p.335.

15. This situation continued until the early 1980s. Korea financed less than two-thirds of its 26.5 percent average investment of the GNP from 1965 to 1981 out of a domestic saving rate that averaged only 18.6 percent; the remainder was financed by capital imports, of which a third was aid, not quite two-thirds loans, and a negligible proportion foreign direct investment. L.J. Lau (ed), Models of Development: A Comparative Study of Economic Growth in South Korea and Taiwan (San Francisco: Institute of Contemporary Studies, 1986), p.169.

16. T. Shishido (ed), Economic Policy and Development: New Perspectives (London: Auburn House, 1985), p.101.

17. Lim, p.84.

18. S.J. Kim and C.W. Kang, Korea: A Nation in Transition (Seoul: Research Centre for Peace and Unification, 1978), p.120.

19. C.J. Kim, 'Foreign Investment in Korea: Law and Administration', Ph.D.thesis, University of Washington, 1972, pp.93-5.

20. P. Hasan and D.C. Rao, Korea: Policy Issues for long-term Development (Baltimore: Johns Hopkins University Press, 1979), p.25.

21. Kim and Kang, p.118.

22. I. Sakong, 'Macroeconomic Aspects of the Public Enterprise Sector' in C.K. Park (ed), Macroeconomic and Industrial Development in Korea (Seoul: Korea Development Institute, 1980), p.119.

23. D.M. Leipziger and others, Korea: Managing the Industrial Transition (Washington, D.C.: World Bank, 1987), p.37.

24. Leipziger and others, pp.38-9.

25. D.C. Cole and P.N. Lyman, Korean Development: The Interplay of Politics and Economics (Cambridge, Massachusetts: Harvard University Press, 1971), p.197.

26. J. Woronoff, Korea's Economy: Man-Made Miracle (Seoul: Sisayongosa, 1983), p.161.

27. Lim, p.102.

28. POSCO remained as a GIE until 1980, when the government's share reduced to less than fifty percent and, therefore, it has become an 'Other Government-Backed Enterprise'.

29. The Korea Herald, 5th December 1990.

30. According to Tarr, the location of the lowest steel-making costs shifted first to Japan in the 1960s and early 1970s, and later to Korea and Brazil. D.G. Tarr, 'Effects of Restraining Steel Exports from the Republic of Korea and other countries to the United States and the European Economic Community,' The World Bank Economic Review vol.3. no.3 (May 1987), p.397.

31. A.H. Amsden, Asia's Next Giant: South Korea and Late Industrialization (New York: Oxford University Press, 1989), pp.291-5.

CHAPTER V

THE REFORM IN THE CONTROL SYSTEM OF GOVERNMENT-INVESTED ENTERPRISES

Korea's rapid economic growth during the 1960s and 1970s is attributable to the government's use of its close supervisory relationship with business to channel private endeavour in accordance with broader national industrial policy. During this period PEs were used as an administrative device and were subject to extensive control and direction, regardless of their legal or organizational form. After the government's aggressive industrialization policy during the 1960s and 1970s, the very success of the development had produced a complex economy with diverse international economic relations.

As a result, Korea faced formidable economic tasks. The structural and macroeconomic imbalances created by declining industries were aggravated by the second oil crisis in 1979 which raised Korea's oil bill from 5 percent of GDP in 1978 to 10 percent in 1980. With the increasing sophistication of the economy and the continuing pressure of international competition, it was obvious that Korea was at a stage of development where its industries should be distanced from the government's direct influence.

In addition, when Korea increasingly sought to attract the more advanced commercial technologies, from electronics to pharmaceutical, there was trade partner criticism that elaborate controls on imports and foreign investment were no longer necessary to protect the domestic economy and were, in fact, hampering healthy trade. Foreign firms that had developed sophisticated proprietary technologies hesitated to enter Korea. This was due to doubts about the business environment in Korea that ranged from government-business relations to the adequacy of patent protection.[1] These developments led to questioning of the long-term viability of close, finely tuned government guidance of economic affairs. Better to have the government step back a few paces and shift to a more open, market-oriented system was the advice heard from domestic and foreign experts.

The new Chun Government took power after the assassination of President Park, recognized that a new legal and policy framework was needed to streamline industrial policy and adopted a view that the degree of centralization in economic activities should be reduced through greater reliance on market mechanisms. This resulted in the adoption of a new approach in the Republic's Fifth Five-Year Economic Development Plan (1982-86). The World Bank reported:

> The plan presented a new philosophy for economic management to adjust to a new situation. In the past, the government set detailed targets for macro-economic variables such as exports,

> investment and growth, and strongly influenced the direction of the economy through financial and fiscal policies, and occasionally by direct government intervention. The new emphasis is on defining basic policies rather than establishing macro-economic targets or detailed investment plans...
>
> The priorities of economic planning have also been redesigned: In the earlier plans, growth was the top priority, equity a distant second and price stability a largely residual objective; in the fifth plan, price stability is the top priority, equity a close second and growth is to be based on improving the long-run efficiency and achieving price stability.[2]

In line with this, the privatization of PEs, the conversion of departmental agencies including the Offices of Monopoly and Communications into GIEs, and the more efficient management of PEs in general, were important concerns of the overall reform programme. In implementing this policy, it was debated over how far the government privatize PEs. The prevailed view on privatization in relation to the intervention motives discussed in Chapter 4 is summarized as follows.[3]

For the first group of basic motives, natural monopolies are characterized by increasing returns to scale. The alternative to public operation is regulation and private monopoly. In addition, they are related to development in that their expansion is necessary if bottlenecks are to be avoided. Collective intermediates are rather a component of broader social development. As for merit goods, the alternative is subsidized private production. Hence, privatization is not regarded necessary or the best answer for this group. The developmental motives deal with activities that the private sector does not undertake independently because of the magnitude of capital requirements, risk, uncertainty, technological complexity, and so on. Hence their privatization should be decided on a case-by-case approach on the basis of such private entrepreneurial support and substitutability. For the power and control motive category, primarily composed of commercial banks and specialized banks, the private concentration of economic power which might be brought about by the privatization of banks can be prevented by avoiding ownership or control by a single interest group.

First of all, it was widely recognized that liberalization and reorganization of the financial structure were vital for the efficiency of the market-oriented economy. Between 1982 and 1983, therefore, the government divested itself of all nationwide commercial banks. In order to prevent ownership and control by a single interest group, however, restrictions were placed on maximum equity holding and voting rights. In line with this, two new joint venture banks were authorized and established in 1982. Competition in the financial sector was further encouraged by the licensing of 43 new mutual savings and finance companies, and 10 short-term finance companies in the same year.[4] Along with this, two departmental PEs (cigarettes monopoly and telecommunications) were transformed into GIEs.

Recent privatization in Korea, however, cannot be considered as a straightforward success. Things were much more complicated than expected. The privatization of commercial banks, for instance, may be a necessary condition for the efficiency of the monetary market, but is definitely not a sufficient condition. The government has only slightly reduced its control over banks in practice, even after denationalization. Most of all, interest rate liberalization, an essential element of financial development, is not permitted by the government; there still exists an excessive fragmentation of interest rates. This fragmentation is reflected in the structure of the financial system since it has encouraged excessive specialization of institutions, thus reducing competition and efficiency. Legislated specialization of institutions was reinforced by detailed government regulation of financial activities, restrictions on new establishments, and by a supervisory system for enforcing these regulations which is itself excessively fragmented.

Furthermore, directed credits by the government have continued to grow and have often involved detailed earmarking of funds by the government down to the level of individual enterprises, so that the banks involved have operated more as a conduit for government funds than as institutions with independent decision-making authority. In short, the recent privatization of commercial banks has done little to enhance competition and efficiency in financial markets in Korea, and government control has remained as effective as it was during the period prior to denationalization. The reasons for this are many, of which four will be cited.

Firstly, the heavy indebtedness of the corporate sector was 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 interest rates would weaken international competitiveness and cause inflation by increasing production costs. Secondly, there exists a big gap between bank deposit rates administered by the government and the relatively freer secondary market yields on bonds and debentures. This has allowed higher rates to prevail in the non-banking segment and has encouraged a more rapid growth of these institutions within the financial system. These non-banking financial institutions have opposed the complete liberalization of interest rates and the introduction of a universal banking system on the basis that they would be wiped out in the face of competition from the larger commercial banks. Thirdly, the government itself perhaps had no true intention of giving up control of commercial banks completely. Lastly, there did not emerge any countervailing power within the commercial banks to stand up and fight for their autonomy and their own interests. Even after denationalization, the presidents and directors of commercial banks still show greater concern and 'courtesy' to the government than to their shareholders, and commercial bankers basically remain quasi-government officials rather than entrepreneurs or managers.

While the recent privatization of commercial banks is dubious in terms of effectiveness and performance, the privatization of other areas such as manufacturing and other services was quite successful. Privatized enterprises such as Korean Air Lines, Daewoo Heavy Industry, and Yukong Inc are a few good examples. All these enterprises are now considered to be operating more profitably and much more efficiently than they were under public control. This was possible because, above all, the government has totally given up any interference in their management, in contrast to the case of commercial banks.

By far the most important reform measures were initiated in order to enhance the efficiency of GIEs, which represent the core of the PEs; account for 44 percent of employment, 52 percent of the total assets, and 44 percent of the sales of the whole PE sector. In 1984, the combined budget of the GIEs amounted to 11,270 billion won, exceeding the general-account budget of the central government, whereas the total investment in GIEs represent 17 percent of gross domestic investment. GIEs are also major holders of domestic credit and external debts: at the end of 1983, they accounted for 24 percent and 56 percent of total external and domestic debentures, respectively.[5] It was calculated that even a slight improvement in efficiency in GIEs could bring about substantial gains in the national economy. For example, a 5 percent improvement in the real efficiency of GIEs in Korea was estimated to free resources amounting to 1.7 percent of GDP, or over one billion dollars in 1981.[6] Increased efficiency of GIEs therefore would bring much-needed relief to the key issues confronting Korea in the 1980s: price stabilization, external debt reduction, and freeing an adequate amount of investment resources for the private sector. Therefore, the management system and practices of GIEs have great influence on the whole economy.

1. The Need for Reform

While the role of PEs has been impressive during the rapid growth period and their performance compared favourably with that of the PE sectors of most other developing countries, it was not up to the expected level. As analyzed in Chapter 4, the production interdependence of Korean PEs is very high in both ways, forwardly and backwardly. Therefore, any managerial inefficiency in the sector could lead to a spill-over inefficiency of other industries which use the output of the inefficient PE. Any managerial issues or problems should be analyzed and solved not only for the PE *per se* but also for the other interdependent industries. It was generally believed that PEs are far less cost efficient than their private counterparts.

Table 5-1 Rate of Return to Capital of GIEs, 1982

	All Industries	GIEs
Normal Profit to Total Asset	27.5	7.8
Operating Profit to Business Capital	10.1	3.7

Source: Bank of Korea, Enterprises Management Analysis, 1983

Table 5-1 shows the ratio of normal profit to total assets and that of operating profit to business capital. The normal profit to total asset ratio equals that of value added to total capital invested in the enterprise, where total capital includes operating business capital, investment capital and capital of construction-in-progress. In 1982, the normal profit to total asset ratio of GIEs was 7.8 percent, which is less than one third of

27.5 percent, the average normal profit to total asset ratio for all industries. It also appeared that as total capital increases, the rate of return to the capital declines more rapidly in the PE sector than the private sector.[7]

Already in the late 1970s, the disappointing level of efficiency, together with the deteriorating financial situation of GIEs and their negative impact on the public sector gave rise to growing concern.[8] The major problems underlying the poor management of GIEs are similar to those commonly found in other countries. These problems include the absence of both the accountability and autonomy of management, complicated budget processes, and inadequate personnel and incentive systems.

Until 1983, the fundamental principle of operational control of GIEs was that it was exercised by a corresponding minister. The minister in charge of a GIE was designated in the foundation law and the implementation decree thereof and had effective power to appoint the corporation's senior management. In addition the law usually makes explicit reference to the intervention powers of the government. According to the Korea Development Bank (KDB) Act:

> The Governor shall be appointed by the President (of the Republic) upon the recommendation of the Minister of Finance; the Deputy Governor and Executive Directors shall be appointed by the Minister of Finance upon the recommendation of the Governor; and the Auditor shall be appointed by the

> Minister of Finance.
> The KDB shall be supervised by the Minister of Finance... The Minister of Finance may give the KDB such orders concerning its business as are necessary...
> The Minister of Finance may request the KDB to submit reports on such matters as are deemed necessary, or instruct a competent official of the said Ministry to examine the status of operations, books, records and other necessary matters of the KDB.[9]

The direction of PE control may fall somewhere between two extremes. Either all decisions are made at the enterprise level, thus ignoring the idea that PEs are useful means to achieve various social objectives; or numerous minor decisions are made or approved by the bureaucracy, thus making it difficult for the enterprise to react quickly to changing market and social conditions. The Korean case came closer to the second pole. It was argued that a rather tight control was justifiable because the government has to adjust the policies of GIEs to the course of the national economy.[10] However, there have been undoubtedly serious bureaucratic problems which make it difficult for managers to respond quickly to changing circumstances.

This problem was exacerbated by multiple controlling agencies. GIEs were responsible to a variety of ministries and agencies for a multitude of mundane details, and managers spent much of their time worrying about managing these bureaucratic relationships. One example of these counter-productive reporting practices is that an average GIE made 33 applications for approval and 37 reports to various ministries of the government in 1982.

GIE budgets were authorized together with the central government budget before the reform in 1984. The problems with this budgeting system were lengthy procedures, duplicative government reviews and limited possibilities for GIE managers' manoeuvrability. According to the Government-Invested Enterprise Budget and Account Act:[11]

a. The Minister of the EPB is required to transmit a request for budgetary estimates to each enterprise by the end of June each year.

b. Each enterprise submits its budgetary estimates to the corresponding minister by August 31 for his review, and he in return submits the reviewed budgetary estimates to the Bureau of the Budget of the EPB. The budget bureau reviews these estimates and prepares the budget for GIEs for transmission to the State Council and the President. The final approval of GIEs' budget rests with the President of the Republic, instead of moving on to the legislature with the rest of the budget.

c. When the budget is approved by the President, the enterprise is notified of the decision by the minister of EPB and the Finance Minister. It is also required that each enterprise, at the beginning of each quarter, transmit quarterly reports for the previous quarter showing performance, income and expense to the ministers mentioned above.

The same law required that final accounts of GIEs were submitted to the MOF and then to the Board of Audit and Inspection (BAI). Later the legislature was required to approve the final closing of accounts, but this was of relatively minor importance. The BAI is responsible only to the President and empowered by law to audit GIEs in addition to the affairs of the central and local governments. GIEs had characteristically suffered from excessive audit and inspection; not only BAI but also the corresponding ministry, the Ministry of Finance and the Office of Supply exercised their power to carry out audit and inspection.

As a result, the inspections caused an enormous waste of manpower and time. The Korea Electric Power Corporation, for example, underwent 8 government inspections, lasting for a total of 108 days, in 1981. Moreover, these inspections focused on discovering violations of regulations. Such inspections induced the management to adopt rather undesirable management practices, in the hope of neutralizing the thrust of inspection.[12]

The government's grip on PEs' management could also be found in the appointment system. Public sector enterprises are often held to be inefficient because managers are constantly rotated and are appointed for political reasons rather than managerial skills. Professor Yu studied the social background of 357 top managers (Presidents, Vice Presidents, Directors, and Auditors) of 56 non-governmental PEs. He found that prior to joining the enterprises, the main occupation of 43 percent had been military (21%) or civil service (22%). More importantly, this included at least two-thirds of all presidents and auditors as well as half the directors in the non-financial institutions.[13]

Appointments are generally for three years so that given a familiarization period and the natural lags in response to innovation, there is little opportunity for success to be recognized. Table 5-2 shows that, as of February 1984, more than 40 percent of GIE top managers had spent less than 3 years with the company and those who spent less than 1 year was as much as 13.4 percent.

Table 5-2 Number of Top Managers by Staying Period

	Financl Sector	Non-fnancial	Total (Percentage)
Up to 1 Year	3	20	23 (13.4)
1 to 2 Years	-	27	27 (15.7)
2 to 3 Years	5	14	19 (11.0)
3 to 5 Years	1	33	34 (19.8)
5 to 10 Years	2	5	7 (4.1)
10 Years Plus	28	34	62 (36.0)
Total	39	133	172 (100.0)

Source: D.H. Song, Han'guk ŭi kongqiŏp kwanri chŏngch'aek [Public Enterprise Management Policy in Korea] (Seoul: Korea Development Institute, 1989) P.123.

Thus Korean PEs are, by and large, operated by ex-civil servants and ex-military officers rather than by professional managers; equivalent to political retirement programmes which have saddled enterprises with officers untrained in business skills.[14] Since appointments are dominated by political considerations and pay is in no way related to performance, there are few incentives. PE managers are generally capable of carrying out a clear command, but the effective signals given by the control structure did not stimulate management efficiency.

2. The Government-Invested Enterprises Reform Measures

The idea of a new framework for PE management including a performance evaluation system was initiated by the Korea Development Institute (KDI), a government-sponsored policy research organization. Working closely with the EPB from 1982 to 1983, KDI formulated a proposal for improving the efficiency of GIEs. With the strong support of the Deputy Prime Minister, KDI undertook campaigns to mobilize the consensus of government, business and academic circles in favour of the reform.[15] As a result, the Government-Invested Enterprise Management Act and its implementation decree took effect in March 1984. The new act merged two existing laws; the Government-Invested Enterprise Administration Act, and the Government-Invested Enterprise Budget and Account Act.

The Management Act provided the general legal framework within which the GIEs operate. Once the Act became effective, the existing decrees needed to be revised to reflect the new Act's general philosophy and specific regulations. The Performance Evaluation Bureau in the EPB had been carrying out that task and by July 1985, the Establishment Acts had been revised for 17 GIEs. The principle of the autonomy of management was further reinforced in the revised individual decrees. Most of the references to 'priori approval' were deleted in the revised Establishment Acts.

The major features of the new law are: introduction of a two-tier management organization; provision of managerial autonomy through the reduction of government control over budgetary, personnel and procurement management; and implementation of an evaluation system with enlarged performance-related incentives.

A. Two-tier Board

The most notable change in the management structure under the new law is the separation of the executive and policy-making boards; upper board (Board of Directors) as a decision-making body took over some of corresponding ministry's previous power, and the lower board in charge of implementation chaired by the Chief Executive Officer (CEO). The upper board members are appointed by the corresponding minister on the recommendation of the chairman, while the chairman and CEO are appointed by the President of the Republic on the recommendation of the corresponding minister. All the members of the upper board including the chairman are to serve on a non-permanent basis. Thus the independence of CEO and fairness of appointment have improved. The CEO now has the power to hire and fire subordinate executive officers without prior approval of supervising ministries and outsiders to the enterprise are no longer eligible for the lower board.[16]

B. Managerial Autonomy

In an effort to rectify shortcomings from the lengthy and duplicative budgeting procedure, the new law grants authority to formulate and implement the budget to GIEs. The abolition of the GIE Budget and Account Act bars the government from reviewing and coordinating the GIE budgets. The government's main role consists in drafting common budget guide-lines issued by the Management Evaluation Council (MEC) - a newly established governmental supervising organization. Also, outside audits have been simplified. The new law designated the BAI as the only authorized inspection agency for GIEs. A corresponding ministry, however, may conduct inspection after consultation with BAI.

In the past, GIEs' big-scale procurement and contracts were handled by the Office of Supply, government's central procurement agency, which was blamed for overlapping procedure and delay. GIEs are now allowed to exercise their own discretion. They can either purchase directly or commission the Office of Supply to do so.[17]

3. The Performance Evaluation System

Korea's 'performance evaluation system', in management parlance, is an operations planning and control system. It involves specifying performance criteria for each PE, setting criterion values, defining gradations of performance around those criterion values, allocating weights to various criteria, evaluating actual performance at the end of the year, and, finally, paying an incentive bonus based on results. The so-called 'signalling system' was first devised by L.P. Jones and has been implemented, with some modification, in Pakistan and Korea since 1983. The system attempts to make the evaluation process more transparent, reduce political interference, increase managerial autonomy, and at the same time render the enterprise and its management more accountable.

In its original design, the proposed criterion for measuring managerial performance is public profitability at constant prices. Public profitability is defined as the difference between production at factor cost minus intermediate inputs, employee compensation, rental expenses, plus net non-operating return, divided by revalued cost of capital. It is recognized that public profitability is a static measure of operating efficiency (i.e. it measures performance only in one period) which would fail to induce PE managers to incur expenditure on items whose benefits would only materialize in the future. To avoid this shortcoming, public profitability is supplemented by some dynamic indicators such as the production of suitable corporate plans, and expenditure on R&D and maintenance. The proposed criterion value (i.e. the yardstick measuring good or bad managerial performance) is based on a comparison of the performance of the enterprise in question in the current period versus its performance in previous periods. The proposed compensation system, is based on motivating managers to tell the truth about what they can do, then rewarding them for subsequently doing the best they can.[18]

The Korean system, however, turned out to be the most important innovation in the control of GIEs, by which a report and priori approval control was replaced with an objective-oriented ex-post evaluation scheme. The GIEs involved fall under about 10 different supervising ministries, all of which report to the Deputy Prime Minister, who also happens to be the Minister of EPB. The government agency primarily responsible for running the system is the Public Enterprise Evaluation Bureau, headed by a director of EPB, who sits on the upper boards of all GIEs. The whole system is overseen by the Management Evaluation Council (MEC), a 14 member committee consisting of the Deputy Prime Minister (chairman), supervising ministers, the head of KDI, and a few professors. As the highest performance evaluation organization, MEC is in charge of the deliberation and resolution of matters related to overall management of GIEs. Technical matters such as selection of performance criteria, its weights and actual evaluation, are handled by the Performance Evaluation Task Force consisting of part-time members; professors of management, economics, engineering, and certified public accountants.

The performance criteria are selected so as to measure the performance of a year against the trends in recent years as well as the degree of the achievements of pre-agreed management targets. Two kinds of criteria are used; quantitative criteria accounting for 70 percent of the final score and qualitative criteria accounting for 30 percent. For each GIE, 10 to 15 quantitative and qualitative criteria are selected. Criteria and their weights are tailor-made for each GIE, although some efficiency criteria are common. Some criteria have two or more sub-criteria and they tend to be added or subtracted from year to year. In 1985, 'public profitability' featured as the primary criterion in 6 GIEs, 'private profitability' in 12 GIEs, and 'labour productivity' in the remaining 7 GIEs.[19]

Qualitative assessment is based on the GIE's performance in four major fields; medium and long range planning, R & D, quality of service and administrative improvements. An example of the criteria for Korea Telecommunications Authority is shown in table 5-3.

Table 5-3 Performance Criteria and Weights for KTA, 1984

Criterion	Weight(%)
A. Quantitative	60
1. Public Profitability	20
2. Technical Reliability & Quality of System	5
3. Number of Telephones Installed	5
4. Long Distance Service	5
5. Admnstrtive Expenses /Turnover	5
6. R & D / Turnover	5
7. Operating Assets / Turnover	5
8. Labour Cost / Turnover	5
9. Fnancial Structure Improvement	5
B. Qualitative	40
1. Long Range Planning	10
2. R & D	7
3. Service Improvement	10
4. Administrative Improvement	13
Total	100

Source: GIE Management Evaluation Council, Kyŏngyŏng p'yŏngga p'yŏnram [Management Evaluation Manual], 1984.

At the end of a year GIEs submit a performance report, which is used to evaluate their performance on individual criteria and, thereby, overall performance, rated on a five-point scale; A=outstanding, B=excellent, C=good, D=fair and E=poor. A bonus ranging from 1 month's salary for an 'E' rating to 3 months' salary for an 'A' rating is paid to employees of the GIE. Previously, all GIEs paid an automatic bonus of 6 months salary to all employees. Now, 3 months salary is paid automatically while the rest is linked to the evaluation result. A GIE that scored an 'A' rating will get the same amount of bonus under the new scheme that all GIEs got automatically in the past.

4. Assessment of the Reform

Given the short experience the question of how far the reform measures have actually increased the economy, efficiency and effectiveness of GIEs cannot yet be answered. A rough indication of positive and negative contributions, however, can be mentioned.

A. Positive Contributions

Firstly, the operating profits have been continuously improving. The GIE total operating profit increased about 65 percent from 1983 to 1986. GIE managers have become more cost-conscious and efficiency-oriented than before. The cost-saving effort is especially apparent in inventory management. An unnecessarily large stock of inventory is discouraged by the evaluation criteria.[20]

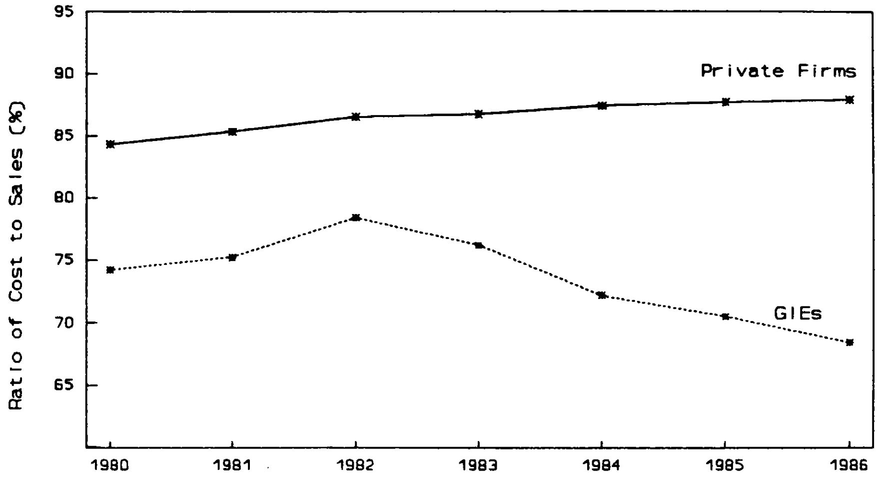
Secondly, the ratio of cost of sales to net sales has been decreasing steadily. Table 5-4 and Figure 5-1 show GIEs' average ratio reduced from the 1980-82 period to the 1984-86 period by 5.5 percent, while that of their private counterparts, whose shares are traded in the Korea Stock Exchange, increased by 2.3 percent.

Table 5-4 Ratio of Cost of Sales to Net Sales

	GIEs	Private Firms
1980	74.2	84.3
1981	75.2	85.3
1982	78.4	86.5
1983	76.2	86.7
1984	72.2	87.4
1985	70.5	87.7
1986	68.4	87.9
80-82 Average(A)	75.9	85.4
84-86 Average(B)	70.4	87.7
B - A	- 5.5	2.3

Source: D.H. Song, Han'guk ŭi konggiŏp kwanri chŏngch'aek [Public Enterprise Management Policy in Korea] (Seoul: Korea Development Institute, 1989) P.163.

Figure 5-1 Comparison of Cost to Sales Ratio



Thirdly, research and development activity has been enhanced. The ratio of R & D expenses over sales rose from 1.0 percent in 1984 to 1.2 percent in 1985, and R & D personnel among all employees increased from 2.1 percent in 1984 to 3.9 percent in 1985. The supervision of R & D activities also improved, compared to the *laissez-faire* style typical in the past.[21]

Fourthly, as the interference from corresponding ministries on day-to-day management has decreased, GIEs' organizational management seems to be slowly improving. The greater flexibility in budgeting, contracting and personnel management encourages them to set new standards and rules appropriate for their needs. Long-term and short-term planning are also established and reviewed. A few GIEs carried out long-term planning even before the reform, but now all GIEs operate with long-term and short-term plans.

B. Negative Contributions

The reform measures have made a considerable impact. At first GIE managers tended not to treat them seriously and regarded the evaluation procedures as simply one more paper exercise. This attitude changed with the publication of results and differentiated bonuses ranging from one to three months' salary were awarded based on these results. From the point of view of the senior executives, the results received widespread attention from the press, politicians and senior government officials. But there seems to be considerable bureaucracy to be overcome. The MEC reports lamented the continuing GIE managements' tendency to rely on the government rather than doing business on their own initiative, while some government ministries still ask for detailed reports on GIE's day-to-day management.[22]

The functioning of the two-tier board system, however, is far from satisfactory. In many cases, the members of the upper board lack professional expertise and make little contribution to decision-making. Although resolutions should be adopted by a majority vote of all members,[23] non-civil servant members seem to be easily overpowered by the representatives of the government ministry.

On the Performance Evaluation System. 'Performance' is a very broad and vague concept: it has various meanings for different audiences in different contexts. For example, the treasury tends to focus on financial performance whereas Parliament may be more interested in the effectiveness of policy, while consumers are anxious about the quality of service delivery. This adds to the difficulties of designing performance criteria because the same set of criteria may need to be used to answer questions about all the different dimensions of performance. Generally, performance criteria should be relevant to the needs and objectives of the organization; in other words they should measure aspects of performance that are central to the efficient and effective delivery of quality services. They should not be susceptible to manipulation by the person or unit to be assessed. Performance criteria should be reliable and need to be, as far as possible, unambiguous.[24]

Concerning the Korean evaluation system, however, a few difficulties can be cited. Firstly, targets are presently set without a detailed review by the task force of the basic objectives and long-term strategy of each GIE. The system checks the quality of strategic planning but not the content of the resulting plans. Without the framework of a long-term strategy it is hard to tell which criteria are really important and whether more of a criterion is better than less of it in the forthcoming year.[25]

Secondly, as many of the quantitative criteria values are determined by projecting past trends, managers will realize that abnormally high achievement in one year will raise targets for future years. Therefore, it is legitimate to worry that they will spend windfall gains on unnecessary items such as administration or employment.[26]

Thirdly, the wide fluctuation in the ranking of GIEs from year to year is largely the result of the very narrow spread in scores.

Table 5-5 Number of GIEs by Evaluated Grades

	Scores	'84	'85	'86	'87	'88
A	95-100	-	-	12	12	9
B	90-94	18	15	12	11	13
C	85-89	5	9	1	1	2
D	80-84	2	1	-	-	-
E	75-79	-	-	-	-	-
Total		25	25	25	24	24

Source: GIE Management Evaluation Council, <u>Chòngbu t'uja kigwan kyòngyòng siljòk p'yongga pogosò</u> [GIE Management Evaluation Report], 1984-1988.

For example, the Korea Electric Power Corporation slid from first to 13th place and the Korea Labour Welfare Corporation rose from 24th to 3rd place in 1984.

A GIE which ranked 20th could have moved up to 7th place if its overall score had increased by only 2.0 points. As a consequence most GIEs get an overall rating of 'A' or 'B' (Table 5-5). Managers, ministers, and the media probably attach too much significance to ranks than they should. GIE employees are under considerable pressure to improve their scores by small fractions and, in some cases, succeeded in getting better marks by cheating at performance-related data.[27]

1. One source of foreign firms' concern was that Korea was becoming less hospitable to early foreign investors who had outlived their usefulness. For example, Gulf Oil experienced difficulties over tax liabilities when it left Korea. K. Moskowitz, 'Issues in the Emerging Partnership' in K. Moskowitz (ed), From Patron to Partner (Lexington: D.C. Heath, 1984), pp.9-10.

2. Quoted from D. Mukerjee, Lessons from Korea's Industrial Experience (Kuala Lumpur: Institute of Strategic and International Studies, 1986), p.13.

3. B.H. Koo, 'The Experience of the Republic of Korea' in Privatization: Policies, Methods and Procedures (Manila: Asian Development Bank, 1985), p.195.

4. Koo, p.198.

5. Young C. Park, A System for Evaluating the Performance of Government-Invested Enterprises in the Republic of Korea (Washington, D.C.: World Bank, 1986), pp.3-4.

6. L.P. Jones, 'Towards a Performance Evaluating Methodology for Public Enterprises: With Special Reference to Pakistan,' 1982.

7. D.H. Song, 'The Role of the Public Enterprise in Korean Economy,' in K.U. Lee (ed), Industrial Development Policies and Issues (Seoul: Korea Development Institute, 1986), pp.196-7.

8. Park, p.4.

9. 'Korea Development Bank Act', Law no.302, 1953, Amended until 1981, Articles 12, 47 and 49.

10. 'Korean Report' in Research Needs in the Management of Public Corporations in Asia, unpublished workshop paper, Kuala Lumpur, Malaysia, 1974, p.15.

11. Workshop paper, pp.14-15.

12. Dae Hee Song, 'A New Performance Evaluation System of Korean Enterprises: policies and experiences', Public Enterprise, vol.8, no.1 (1988), p.85.

13. Yu Hoon, Konggiŏp imwŏn ŭi sahoejŏk baegyŏng [Social Background of Public Enterprise Managers] (Seoul: Korea Development Institute, 1974), pp.53-6.

14. Norman Jacobs, The Korean Road to Modernization and Development (Chicago: University of Illinois Press, 1985), p.116.

15. Park, p.6.

16. Song, Performance Evaluation p.85.

17. Song, Performance Evaluation p.85.

18. A. Galal, 'Institutional Framework for Efficient and Sustainable Restructuring of State-Owned Enterprises,' Public Enterprise vol.9, no.2 (1989), p.118.

19. Ravi Ramamurti, 'Observations on the South Korean System for Performance Evaluation of Public Enterprises', unpublished working paper 86-33, Northeastern University, 1986, p.2.

20. Song, Performance Evaluation p.91.

21. Song, Performance Evaluation p.91.

22. GIE Management Evaluation Council, Chŏngbu t'uja kigwan kyŏngyŏng siljok p'yŏngga pogosŏ, 1984 [GIE Management Evaluation Report], 1985, pp.404-5 and same report for 1985, p.251.

23. 'Government-Invested Enterprise Management Act', Law no.3690, 31st December 1983, Article 10.

24. N. Carter, 'Learning to measure performance: the use of Indicators in organizations', Public Administration, vol.69, no.1 (Spring 1991), pp.85-101.

25. Ramamurti, p.10.

26. Ramamurti, p.13.

27. Board of Audit and Inspection, Kamsa yŏnbo, 1986 [Audit Report], 1987, p.397.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The PE has a long tradition in Korea. Its relative importance in the economy dates back to the Japanese colonial period. Japan used PEs in the peninsula as an effective means for her economic and military aims and the sector accounted for about half of the colonial government revenues.

After years of political and social unrest since her independence, Korea gained stability and embarked upon a period of rapid industrialization in the early 1960s. The remarkable economic growth achieved since then cannot be explained by a liberal economic interpretation based on market-oriented private enterprise. This is particularly true during the two critical decades of the 1960s and 1970s in which Korea transformed its predominantly agricultural economy towards an export-oriented manufacturing economy. The government, as the guide and coordinator, has shown itself to be both willing and capable of assuming important enterprise functions in its pursuit of economic development. Being a leading sector, PEs played an important role in Korea's rapid economic growth during this period. They grew significantly more rapidly than the economy as a whole. The dominant role of the public sector had evolved through Korea's long history, where a strong sense of racial homogeneity and the influence of neo-Confucianism can be noted as important socio-cultural factors.

Under the name of guided capitalism, national planning and PE were intensively utilized by the Park Government in achieving rapid economic growth. The government adopted planning for five-year periods as a tool for ensuring orderly growth. While PEs played a critical role as providers of industrial base and inputs for the manufacturing sector by heavily engaging in such key industries as infrastructure, energy, and raw materials, thus possible bottlenecks for industrialization could be eliminated. PEs typically were found in the heavy-chemical industries, as pioneers and means of promoting industrialization where capital and technology barriers to entry were very high. In addition, PEs were key players in the financial sector. By engaging in credit rationing in accordance with the government's industrial policy, financial PEs gave the government a powerful means of control over the private sector.

As the economy grew in size and complexity the government could no longer command it efficiently, and it is generally believed that Korean PEs are less cost efficient than their private counterparts. This belief became dominant in the early 1980s and brought an unprecedented reform in the direction of Government-Invested Enterprises, the core group of the PE sector, as part of the economic liberalization measures in 1984. Consequently the budget, appointment and procurement processes which had been subject to government's detailed scrutiny have been put under the responsibility of management and instead a unique performance evaluation system has been introduced.

The question of how far the reform measures have actually increased the performance of GIEs cannot yet be fully answered. Obviously there is plenty of room for improvement in some areas, i.e., the functioning of the two-tier board system, and the setting of targets and evaluation criteria for individual PE's. Also there are some undesirable side-effects like excessive competition among GIEs and bureaucratic inertia. Nonetheless, the preliminary data suggest a handsome improvement in the management performance in terms of production cost, operating profits, and research and development activities.

APPENDIX A: THE KOREAN PUBLIC ENTERPRISE SECTOR, 1986

Type of Public Enterprise	Characteristics	Number of PEs (1987)	Employment (thousand)	Turnover (Won, thous million)	Assets (Won, thous million)
Government Enterprises	Government department type	4	73	2,683	9,507
Government-Invested Enterprises	Government share: at least 50 percent	26	160	10,098	55,970
Subsidiary Companies of GIEs		68	75	5,825	8,022
Other Government-Backed Enterprises	Government share: less than 50 percent	6	31	3,954	27,931
Local Public Enterprises		119	25	465	5,354
Total		223	364	23,025	106,784

APPENDIX B: GOVERNMENT-INVESTED ENTERPRISES, 1988

	Employ-ment	Turnovr (Won, thous mill)
Korea Development Bank	1,990	722.7
Small & Medium Industry Bank	8,406	266.9
Citizens National Bank	11,799	336.4
Korea Housing Bank	8,382	264.6
Korea Securities Printing & Minting Corp	2,748	62.8
Korea Electric Power Corp	25,999	2,080.2
Daihan Coal Corp	14,526	109.8
Korea Mining Promotion Corp	480	8.5
Korea Petroleum Development Co	446	13.2
Korea Gas Corp	720	206.2
Korea National Housing Corp	2,594	345.1
Korea Highway Corp	2,896	117.2
Korea Water Resources Corp	1,901	261.3
Korea Land Development Corp	1,398	166.1
Agricltrl Prodcts Marketng Corp	640	23.3
Agriculture Development Corp	1,881	81.8
Korea Trade Promotion Corp	575	16.6
Korea General Chemical Corp	46	18.7
Korea Overseas Development Corp	197	1.3
Korea Labour Welfare Corp	1,570	15.1
Kukchong Textbook Company	487	11.6
Korea National Tourism Corp	758	42.1
Korea Tlcommunication Authority	53,036	1,271.7
Korea Broadcasting System	5,437	144.2
Korea Monopoly Corp	11,190	1,003.6
Total (25)	160,097	7,591.0

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