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IS THE MANAGEMENT EVALUATION SYSTEM OF STATE-OWNED ENTERPRISES IN THE REPUBLIC OF KOREA A GOOD TOOL FOR BETTER PERFORMANCE?

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Abstract

Based on the need for balance between autonomy and accountability in the management model of public institutions, an active discussion is needed for improvement of the evaluation system. A comprehensive control structure for better performance needs a smart evaluation system. However, from the perspective of the Organisation for Economic Co-operation and Development (OECD)'s guidelines for reforming the governance of state-owned enterprises (SOEs), comprehensive approval of the specific interference and influence of government concerning the operation of individual SOEs has many problems. Therefore, it is important to look for the balance point between standardization and customization.

Ruminating on the Republic of Korea's SOE evaluation system with its 35-year history gives us many insights. Through historical institutionalism, we have learned that proper harmonization between structural reform on the hardware side and improvement of the program on the software side is extremely important, and it can be stably integrated into a systematic monitoring system. In accordance with that, it is necessary to design reform that takes into consideration the characteristics of individual institutions such as ownership structure, marketability, public interest, the size of the institution, etc., and to enhance the evaluation system for effective implementation. Every time a new administration emerges, privatization, structural reform, and the coordination of functions are essential processes to adapt to changes in the environment, and such improvement in the evaluation system of SOEs in the Republic of Korea so far shows moderate results. The fact that one system survived 35 years in the dynamic Republic of Korea proves it.

Keywords: state-owned enterprises, SOEs, quasi-governmental organizations, QGOs, performance evaluation, Republic of Korea, policy tool

JEL Classification: L30

Contents

1. INTRODUCTION

State-owned enterprises (SOEs) in the Republic of Korea played a leading role in the post-war economic development process, but their role has been gradually reduced as the role of the government in the economic development process is replaced by the private sector (Park 2009). In the early 1960s, government-led development resulted in the government directly substituting the private sector to manage SOEs and organize private enterprises by effectively directing large-scale labor and capital. From the 1980s to the 1997 pre-International Monetary Fund (IMF) period, this method of government intervention in economic development became more indirect. As the industry and the private sector grew, various businesses were created outside government control, and the role of the government in economic development was gradually diminished as concerns over excessive government intervention and government failures were raised. From 1999 to 2017, after the economic crisis, restructuring and reforms took place throughout the entire government structure and the economy due to the global trend of neoliberalism and growing concerns about government failure. During the period from 1998 to 2003, large-scale privatization of public enterprises led to significant development of the market economy. In 2007, the law on the operation of public institutions was introduced to organize the governance structure for public institutions. As a result, the government's role in the economy as a whole has become smaller, and various private sectors, including financial and network businesses, have grown significantly. In the process, the role of public enterprises in the Republic of Korea has also changed. In the early stage of economic development, the government did not have sufficient resources for the private sector, and it operated a public corporation to carry out large-scale social overhead capital (SOC) and investment projects centered on public corporations and to prevent monopolization of electricity, gas, communications, and networks. However, as the economy grew and matured, most of these public enterprises were privatized, and the role of public corporations as a major policy tool for economic development was reduced.

Nonetheless, Korean public enterprises still play a major role in public administration by serving as a proxy organization for carrying out government policy, as well as providing public services on behalf of the government. This can be confirmed by the government budget, the size of the projects of all public institutions, and the size of the budget supported by the government. As of the end of 2018, the gross value of public sector projects was 647.4 trillion won, 1.6 times the government's total expenditure of 406.6 trillion won (Korea Institute of Public Finance [KIPF] 2019). As of 2019, the budget for government support for public institutions is 74.4 trillion won, accounting for 15.8% of the total government budget of 470.5 trillion won (National Assembly Budget Office 2019). In the end, if public institutions fail to achieve their management outcomes due to inefficient operations, the government's fiscal soundness may deteriorate.

In order to manage public enterprises efficiently, the Korean government enacted the Basic Act on Management of Government-Invested Institutions in 1984 to institutionalize the management evaluation system for government-invested institutions. Since 2007, the law on the operation of public institutions has been enacted, thereby making it possible to unify existing evaluation systems, which are divided into government-invested institutions and affiliated institutions, and to manage public enterprises and public institutions more efficiently (performance evaluation system for SOEs). Since then, public institution management evaluation system in the Republic of Korea has improved performance by solving management inefficiency resulting from principal-agent problems and information asymmetry problems caused by the nature of public corporations. Despite the 20 years since the introduction of the management

evaluation system for public institutions, the problems of public trust due to the high debt ratio of public institutions, poor management, and hiring and bidding irregularities have continued. In particular, as the evaluation index of the current performance evaluation, which was introduced in 2007 and has been implemented for 12 years, has been continually changed in accordance with the changes in government policy, the performance indicators of management performance evaluation play a role in improving the actual management performance of the public institution.

The constant debate in previous studies related to public agency management evaluation also provides different arguments for the effectiveness of the management evaluation system. Some suggest that management evaluation has contributed to management performance by improving the service quality of public institutions and improving management efficiency (Abramov et al. 2017; Aivazian et al. 2005). On the other hand, others argue against whether management performance evaluation has substantially improved the management performance of public institutions (Aharoni 1981; Behn 2010; Brewer and Seldon 2000; Ellwood 2000). This is because the management evaluation system is limited in its effectiveness due to operational flaws, and there is no significant improvement in the application of performance indicators and weights. The results of previous studies are different because the performance of public institutions is difficult to measure and there is uncertainty about the effectiveness of performance evaluation.

Based on recent discussions about the effectiveness of the management evaluation system, this paper, through literature analysis, case study, and empirical analysis, examines whether the Korean government's management performance evaluation system contributed to improvement of the productivity and profitability of public corporations. In particular, it is difficult to measure the performance of a business: each public institution has its unique characteristics, and the performance measure should consider both profitability and publicness. The main structure and contents of this paper are as follows. In Section II, we review recent discussions and previous researches related to the management evaluation system. Sections III and IV describe the status of the public corporation and public agency management performance evaluation system in the Republic of Korea. Finally, Section V provides conclusions and policy recommendations.

2. LITERATURE REVIEW

2.1 Performance Evaluation System for the Formation of Desirable Corporate Governance for SOEs

Discussion on the performance evaluation (PE) of SOEs is based on public sector reforms such as New Public Management (NPM), public sector reform (PSR), and government reform. PE systems aimed at improving the performance of the public sector can be broadly divided into restructuring, securing autonomy and accountability, and performance monitoring and evaluation, among which the PE plays an integral role in improving performance. The PE system clarifies the relationship between the government and public institutions through performance contracts between the government and heads of institutions (Park 2014), and contributes to efficient domestic and external market operation through the creation of desirable corporate governance structures (Organization for Economic Cooperation and Development [OECD] 2015).

It is difficult for SOEs to achieve a long-term performance orientation due to their innate characteristics, such as owner-agent problems and transaction costs arising from information asymmetry. Thus, they require a balance between administrative autonomy and government control (Park 2014). Securing a balance between autonomy and control is a key issue that penetrates the corporate governance and overall management system of SOEs. The government, which is responsible for supervising and monitoring the performance of SOEs, needs to manage SOEs (Ring and Perry 1985; Shirley and Nellis 1991). The government measures and evaluates the performance of public institutions in order to enhance and control their management efficiency (Bruns 1993). Effective performance management systems can also improve the quality of public services by mitigating owner-agent problems and securing efficiency (Wholey and Hatry 1992). However, in the process, there may be excessive government intervention in SOEs according to political considerations, which can lead to a reduction in accountability and capacity in the operation of SOEs (OECD 2015). This is because the various controls set by the government for efficient management of SOEs can rather constrain their autonomy and make it difficult to adapt to economic changes (Ra and Yoon 2013).

In this regard, the performance of SOEs may be improved when the management autonomy of an SOE is at a level similar to that of a private corporation (Aharoni 2000). After all, the PE system should be able to secure a balance between government control to maintain publicness and autonomy to pursue corporate profitability. Recently, researches have analyzed whether the management evaluation system is properly performed according to its original purpose and the nature of the public institution (Grey and Jenkins 1993; Jang and Park 2015). Gray and Jenkins (1993) analyzed the impact of the PE system on the management performance and decision-making of financial management, organizational management, etc., and verified the effectiveness, then presented direction for improvement for the PE system.

2.2 Theoretical and Empirical Debates Related to Measuring the Performance of SOEs

While it is difficult to define the concept of performance because of its complex nature (Brewer and Seldon 2000), the definition and measurement of performance for a public institution are more difficult. This is because public institutions are a mixed form of private and public organization. A company's performance is generally measured by its profitability indicators, such as gross return on assets (ROA), return on equity (ROE), total sales, net assets, or labor productivity (Abramov et al. 2017; Aivazian et al. 2005). This is an appropriate method for measuring and assessing the performance of a private company that can clearly measure ownership, financial structure, and output. Profit maximization is widely regarded as the appropriate goal of private firms, yet in the case of SOEs, profitability is only one of several goals, and often not the most important (Aharoni 1981). Financial profitability cannot be the sole criterion for judging performance, because SOEs were created to achieve social or strategic objectives, and reported profits often depend critically on the prices of both inputs and outputs by the government (Aharoni 2000). SOEs may be expected to create employment, help develop laggardly regions, make unprofitable products in uneconomic plants, develop national technological capabilities, hold down prices, or earn foreign exchanges, even if pursuing those goals hurts their financial performance (Ramamurti 1987). If public corporations simultaneously act to pursue profitability and provide public services, there may be a negative impact on their performance measured around profitability (Forfas 2010; Nguyen et al. 2015). This can also be seen through the results of prior studies showing that SOEs are less capable and inefficient compared to private firms in the same industrial group (Kikeri et al. 1992; Likierman 1983; Ram et al. 1976).

Furthermore, SOEs usually operate in relatively non-competitive markets and have their autonomy limited by government interventions (Taghizadeh-Hesary et al. 2019). In particular, if the government uses SOEs as a management tool for achieving a policy purpose, the performance of SOEs can be distorted (Behn 2010; Ra and Yoon 2013).

Thus, the multitude of goals, the contradictory directions from government, and the perverse incentives make measurement of performance by financial result inadequate (Aharoni 2000). After all, performance evaluation for SOEs is fundamentally different from the evaluation of performance for private companies. This is because measurement and evaluation of the performance of SOEs should take into account both political considerations and the complexity of the business project. As a result, some scholars have argued that it is difficult to assess the performance of SOEs unless they are run for profitability (Likierman 1983; Robson 1962). Thus, measures of performance for SOEs range from hard measures such as profitability, productivity, or growth rate to softer behavioral measures such as employee satisfaction, legitimacy, or managerial incentive or adaptability (Aharoni 2000).

In addition to profitability indicators, methods of measuring performance have also been suggested recently in consideration of institutional and national characteristics such as operating conditions, financial structure, size and HRM status, leadership, market structure, government policies, etc. (Brewer and Selden, 2000; De Castro and Uhlenbruck 1997; Ingraham et al. 2003; Murtha and Lenway 1994; Li and Tang 2009; Rainey and Steinbauer 1999; Taghizadeh-Hesary et al. 2019). After all, it is necessary to consider the various factors comprehensively in order to measure the performance of SOEs (Aharoni 1981).

3. SOEs IN THE REPUBLIC OF KOREA

3.1 Historical Overview of SOEs in the Republic of Korea

SOEs in the Republic of Korea have been used as policy tools for government market intervention while being responsible for the production and supply of public services (Kwak 2003). This is a result of the government replacing the private sector and leading economic development in a situation where the private economy has become extremely vulnerable after the Korean War. This is very similar to the phenomenon in Western countries such as Europe, the United States, and Canada, where public corporations' policies were expanded to address natural monopolies and to address imbalances among industrial sectors after World War II (Toninelli 2000). Due to this historical and environmental peculiarity, SOE policies in the Republic of Korea are relatively poor in terms of separating commercial and policy functions, and tend to be regarded as direct policy tools. This is a phenomenon that occurs in most developing Asian countries (Kim et al. 2010).

The ownership structure of SOEs in the Republic of Korea is also a centralized model in which a single government department or government agency acts as proprietor in all aspects of finance, operations, audits, and performance management (KIPF 2017). In the Republic of Korea, however, the Act on the Management of Public Institutions (AMPI) was enacted in 2007, and the performance evaluation system for public institutions was formulated. Related systems were continually improved for the purpose of systematizing the governance structure of SOEs and balancing the government's control and autonomy of management. In the 1980s and 1990s, before the IMF economic crisis in 1997, the economic fundamentals were established in accordance with the development of key industries and rapid economic growth, which led the government to take an indirect

approach to economic development. During this period, as the private economy grew sufficiently, various business outcomes were created outside of government control, and the government's role in economic growth was also reduced due to the emergence of NPM theories around the world and concerns over excessive government intervention.

The expansion of neo-liberalism and NPM theory from 1998 until recently after the economic crisis led to reforms in government structure and the economy as a whole. After the economic crisis, the market economy was greatly expanded, with the restructuring of inefficient governments and firms, and the privatization of large-scale public corporations. In 2007, the AMPI was enacted and the corporate governance structure of public institutions was organized. Through the enactment of the law, the governance structure of SOEs was standardized by institutional type, and a governance structure and PE system were implemented for SOEs. As a result, the role of the government is more restricted, and the private sector, including various industrial groups, has grown significantly. In the process, Korean public enterprises were also largely privatized, and their role as a means of implementing government policies shrank.

3.2 Current Status of SOEs in the Republic of Korea

As of January 2019, 339 institutions have been designated public institutions under the AMPI to provide basic goods and services needed for people's daily lives, including electricity, gas, roads, airports, ports, finance, medical and social welfare services, four major insurance policies, safety-related public inspections, and R&D; these play a pivotal role in the people's lives. Table 1 shows the list of SOEs and Quasi-government organizations (QGOs) that have been designated through the deliberation and resolution of the Ownership Steering Committee. As of 2019, there is a total of 36 SOEs, divided into 16 market-type and 20 quasi-market-type SOEs. QGO comprise a total of 93 institutions, classified by 14 fund management-type institutions and 79 commissioned service-type institutions.

Table 1: Designated SOEs and QGOs (2018–2019)

	Number of Designated Institutions	
Type of Institution	**2018**	**2019**
SOEs	35	36
Market-type	15	16
Quasi-market-type	20	20
QGOs	93	93
Fund management-type	16	14
Commissioned service-type	77	79
Non-classified public organization	338	339

Source: Ministry of Economy and Finance (2019).

The classification system for the institutional components of the public and private sectors within the national economy is defined differently by country. The institutional components of the public and private sectors of the Korean central government can be classified as shown in Figure 1. Whether a particular institutional unit belongs to the public or private sector depends on whether the institutional unit is owned or controlled by the government or the private sector. In addition, the types and characteristics of individual institutional units that constitute the public and private sectors may be

classified according to the relative extent to which certain institutional units serve public or private interests (or profitability).

Another criterion for classifying the types and characteristics of the institutional units that make up the public sector is the degree of separation from the government, or the degree of autonomy of those institutional units. The institutional units that form the public sector naturally tend to be more public and less autonomous, because the public sector has a closer relationship with the government. On the other hand, as the relationship with the government grows more distant, the units have a less public nature and more autonomy. As seen in Figure 1, SOE, QGO, government-funded research institutes, and corporate-type organizations are the key agents that make up the public sector. At the same time, they are located at the boundary between the public and private sectors. SOEs and QGOs are the basic institutional units that make up the public sector. Under the current AMPI, SOEs (market-type and quasi-market-type SOEs) and QGOs (commissioned service-type and fund management-type QGOs) are defined as the institutional units that make up the public sector. Thus, from a systematic perspective, defining SOEs and QGOs accurately is an important policy task.

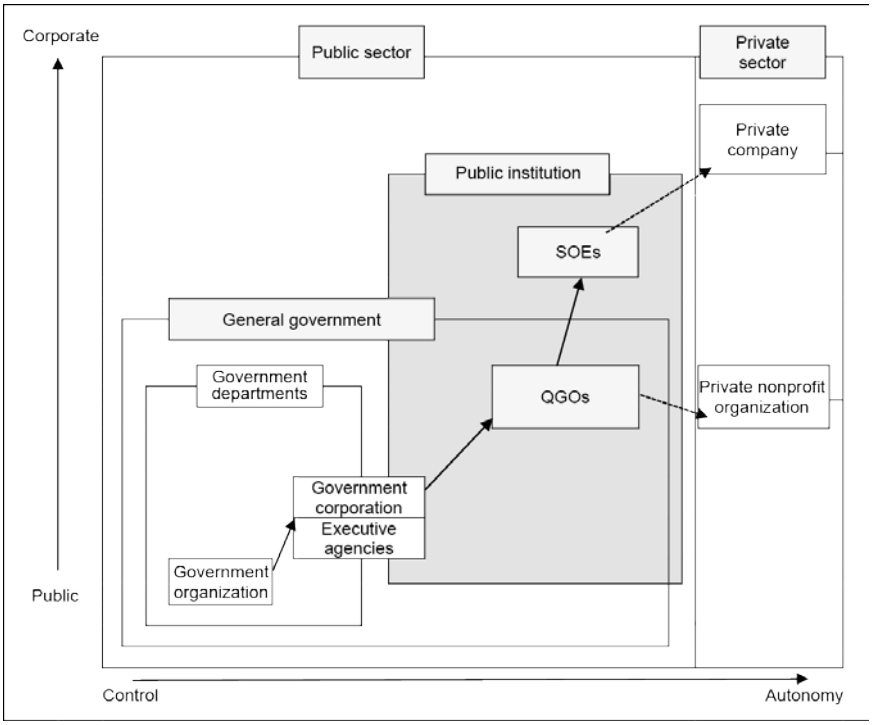
Figure 1: Institutional Units Comprising the Central Government's Public Sector and the Private Sector

<table>
<tr><td colspan="4">Agent of ownership and control: Government</td><td colspan="5">Private</td></tr>
<tr><td colspan="4">Public nature ← → Corporate nature</td><td colspan="5">Public nature ← → Corporate nature</td></tr>
<tr><td colspan="9"></td></tr>
<tr><td colspan="7">Public Sector</td><td colspan="2">Private Sector</td></tr>
<tr><td colspan="3">Government Sector</td><td colspan="4">SOEs and QGOs</td><td colspan="2">Nonprofit sector</td><td>Profit Sector</td></tr>
<tr><td>Government ministries</td><td colspan="2">Executive agencies</td><td rowspan="2">Government funded research institutes</td><td colspan="2">QGOs</td><td colspan="2">SOEs</td><td>Nongovernment organizations (NGOs)</td><td>Non-profit organizations (NPOs)</td><td>Private corporations</td></tr>
<tr><td>Government enterprises</td><td>Administration-type agencies</td><td>Corporate type institutions (government enterprises)</td><td>Commissioned service type QGOs</td><td>Fund management type QGOs</td><td>Quasi market type SOEs</td><td>Market type SOEs</td><td></td><td></td><td></td></tr>
<tr><td>Ministry of Economy and Finance of the Republic of Korea (MOEF)*</td><td rowspan="2">National Museum of Modern and Contemporary Art</td><td>National Police Hospital</td><td>KDI</td><td>KOTRA</td><td>National Pension Service</td><td>Korea Minting and Security Printing Corporation (KOMSCO)</td><td>Korea Gas Corporation (KOGAS)</td><td rowspan="2">People's Solidarity for Participatory Democracy</td><td rowspan="2">Korea Chamber of Commerce and Industry</td><td></td></tr>
<tr><td>Korea Postal Service</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Source: KIPF (2019).

As shown in Figure 2, the types of institution in the public sector of the Korean central government are government sector institutions (such as government organizations, executive bodies, etc.), general government institutions (government sector and QGOs), and SOEs and QGOs (QGOs, corporate-type agencies, government enterprises, and SOEs). Of these, the scope and type of SOE and QGO under the AMPI can be divided into QGOs (commissioned-service type and fund management-type QGOs), corporate-type agencies (special accounts organizations of executive agencies), government enterprises, and market-type and quasi-market-type SOEs. Among SOEs, those within the scope of the national SOEs are corporate-type organizations (special accounting organizations of administrative agencies) government enterprises, market-type and quasi-market-type SOEs, as defined by the AMPI.

Figure 2: Relationship between the General Government and SOEs and QGOs in the Public Sector



Source: KIPF (2019).

The Minister of the Economy and Finance in the Republic of Korea can designate SOEs and QGOs in accordance with Article 5 of the AMPI by classifying them as SOEs, QGOs, or non-classified SOEs and QGOs as shown in the Table 2. Among such SOEs and QGOs with more than 50 staff members, SOEs should be designated from among those whose self-generating revenue reaches or exceeds half of the total revenue, and QGOs should be designated from among SOEs and QGOs that are not classified as SOEs.

Table 2: Criteria for the Classification of Types of SOE and QGO

Year	Major changes
SOE	Self-generating revenue ≥50%
Market-type	Institutions whose self-generating revenue ≥85% (and asset size > KRW 2 trillion)
Quasi-market-type	Self-generating revenue of 50 to 85%
QGO	Self-generating revenue <50%
Fund management-type	Institutions that manage a central government fund
Commissioned service-type	QGOs that are not fund management-type institutions
Non-classified public organization	Publicly funded organizations that are not SOEs or QGOs

Source: KIPF (2019).

SOEs are then divided into market-type SOEs (SOEs with asset sizes reaching or exceeding KRW 2 trillion and self-generating revenue out of total revenue that reaches or exceeds the criterion prescribed by presidential decree) and quasi-market-type SOEs (SOEs other than market-type SOEs). QGOs are classified as fund management-type (for which the management of a fund is assigned or commissioned pursuant to the National Finance Act) and commissioned service-type (QGOs other than fund management-type QGOs).

The budget for public institutions is about 1.54 times the government budget, which is about 41.3% of GDP, and public institutions accounted for a large proportion of the national economy (KIPF 2018) as of 2017. As shown in Table 3, the government-supported budget for public institutions in 2019 is 74.4 trillion won, which is 15.8% of the total government budget of 470.5 trillion won, 0.2% p higher than that of 2018.

Table 3: Government Support Budget for Public Institutions to Total Government Expenditure

Unit: trillion won, %

Classification	2017 (Settlement)	2018		2019 Budget (B)	Rate of Change	
		Main Budget	Supplementary Budget (A)		B–A	(B–A)/A
Government support budget (a)	68.0	68.1	69.3	74.4	5.2	7.4
Total government expenditure (b)	406.6	428.8	432.7	470.5	37.8	8.7
Proportion (a/b)	16.7%	15.9%	16.0%	15.8%	△0.2%p	

p The symbol and number explain the changes of proportion of government-supported budget to total government expenditure from 2018 to 2019.

Source: National Assembly Budget Office (2019).

4. PERFORMANCE EVALUATION SYSTEM FOR SOEs IN THE REPUBLIC OF KOREA

4.1 Historical Overview of Korean SOEs

The PE system in the Republic of Korea has played a pivotal role as a management system for SOEs that harmonizes conflicting tendencies such as the public interest, profitability, efficiency, and political control required for public institutions. The public corporation is independent from the government and is a separate accounting entity that is responsible for decision-making. Therefore, it is essential to manage performance focused on the corporate character (Park 2014), because it seeks profitability and publicness at the same time. The PE system, in accordance with the government-invested institution management law established in 1984, was a system to secure accountability for self-management while granting autonomy for the management for public corporations (Park and Yu 2011).

The post-introduction management evaluation system has maintained a method to evaluate by comprehensively considering non-quantitative factors and quantitatively measured business performance, organizational capacity, and improvement efforts. In short, the Korean PE system is the product of a historical process, and the important elements of the current PE system can be viewed as continuing from 1984 and 2007. Changes in the PE system for SOEs in the Republic of Korea can be divided into four stages, as shown in Table 4. The first period was from 1984 to 1998, when the

Framework Act on the Management of Government-Invested Institutions (FAMGII) was enacted and the foundation of the current PE system established. The PE system for government-invested institutions, which was institutionalized in 1983, was expanded to include both public and quasi-government organizations in 1998. The purpose of the FAMGII was to mitigate excessive control over government-invested institutions and adopt an accountable management system. An accountable management system is a system in which government-invested institutions are assured of managerial autonomy and evaluated on their performance.

The second period is the period when the PE system was expanded after the economic crisis with the restructuring of government and the privatization of major SOEs. With the introduction in 1999 of the performance contract system for the head of government-invested institutions, the target of the PE system expanded to the president of the institution as well as the institution itself.

Under the OECD guidelines (2005), the Act on the Management of Public Enterprises was enacted by abolishing the existing Government Investment Institutions Standards Act and the Government-Operated Management Framework Act. The Act on the Operation of Public Institutions was enacted to enable readjustment of the management evaluation system, which covers existing government-invested institutions and public institutions and has been used as a basis for the management of public corporations. The act was presented by international organizations, including the OECD Guidelines on Governance of Public Institutions, and has been used to date as a basis for the management evaluation system of Korean public institutions.

The AMPI became the basis of the Korean PE system for SOEs, and the PE system for public institutions has been continually improved for the efficiency of the evaluation model since 2011.

Table 4: Changes in Performance Evaluation Systems in the Republic of Korea (1984–present)

Classification	1st	2nd	3rd	4th
Evaluation system	Introduction and retention evaluation system	Expanded and applied	Overall reform of public enterprise control structure in line with OECD guidelines	Efficiency of evaluation model
Period	1984–1998	1999–2006	2007–2010	2011–present
Law	Framework Act on the Management of Government-Invested Institutions (FAMGII, 1984)	Framework Act on the Management of Government-Invested Institutions (FAMGII, 1984) Framework Act on the Management of Government-Affiliated Institutions (FAMGAI, 2004)	Act on the Management of Public Institutions (AMPI, 2007)	
Evaluation system	Institution evaluation	Institution + CEO evaluation	Institution + CEO evaluation	

Source: KIPF (2019).

4.2 Current Status of Performance Evaluation System for Korean SOEs

4.2.1 Evaluation Target

As shown in Table 5, the public institutions subject to the current PE are classified into five types. The current PE system has a problem in terms of the objectivity of the assessment, as there is a mix of organizations with different characteristics within the same type. In particular, the institutions included in the SOE II type are evaluated according to the same criteria, although their size and character are very different. For example, energy-related public enterprises and agencies responsible for appraisal or housing assurance are assessed by applying the same indicators, although they should be evaluated by different indicators. A method of evaluating organizations with different institutional capacities based on the same criteria may reduce the objectivity of the evaluation as well as compliance with the evaluation results. In addition, when institutions with different characteristics are evaluated collectively by the same index, it is very likely that the institution will operate in a different direction from the established purpose and function of the institution for the management evaluation (Lim and Park 2010). These problems lead to the fundamental question as to whether or not an organization with a superior PE result provides good quality services.

4.2.2 Indicators of Performance Evaluation

The evaluation categories of the PE system have been simplified according to the flow of time and the development of the system since its introduction. In 1984, the PE for government-invested institutions covered six categories in total, but it has covered only two categories of business management and major business since 2014. The categories of PE system were simplified according to the flow of time after the introduction and the development of the system. In 1984, the management evaluation of government investment institutions covered six categories, but from 2014 onwards only two main categories of business management are covered.

Table 6 shows the performance indicators that serve as benchmarks for PE. In 2007, PE was divided into overall management, major business, and business management. However, after significant improvement of the PE system for public institutions in 2008, the category of indicators changed to leadership and strategy, management system, and management performance. The distinction between quantitative and non-quantitative indicators is also unclear. This is a change that quantifies the quality of the organization in accordance with the Malcolm Baldridge (MB) model and focuses more on the leadership and organizational internal strategy of the agency head, which is an internal factor of the organization.[1]

[1] The Malcolm Baldrige National Quality Award was envisioned as a standard of excellence that would help US organizations achieve world-class quality. The criteria help to assess performance on a wide range of key business indicators: customer, product and service, financial, human resource, and operational.

Table 5: Types of SOE Subject to PE (as of 2019)

Type		Criteria/Functions	Examples
SOEs	SOE I (Full market governance)	A large-scale organization whose main business is planning, construction, and management of social infrastructure facilities (SOCs) Designated by the provisions of Articles 4 to 6 of the AMPI	Incheon International Airport Corporation Korea Gas Corporation Korea Expressway Corporation Korea Water Resources Corporation Korea Electric Power Corporation
	SOE II (Semi-market governance)	Organizations mainly engaged in the promotion of industries in specific fields, medium-to-small SOC institutions, subsidiaries, etc. among public enterprises designated by the provisions of Articles 4 to 6 of the AMPI	Incheon Port Authority Korea Land & Housing Corporation Korea Appraisal Board Korea Tourism Organization Korea Racing Authority Korea Hydro & Nuclear Power Corporation Korea Minting, Security Printing & ID Card Operating Corporation
Quasi-government agencies	Fund management-based	A fund management-type quasi-governmental organization in which the prescribed number of employees are 50 or more according to the provisions of Articles 4 to 6 of the AMPI, Management of funds is based on the National Financial Law or outsourced Designated as an institution (except for small and strong institutions	National Pension Service Korea Workers' Compensation & Welfare Service Korea Technology Finance Corporation Korea Credit Guarantee Fund Korea Deposit Insurance Corporation Korea SMEs and Startups Agency
	Commissioned service-based	An organization with the prescribed number of employees of 50 or more according to the provisions of Articles 4 to 6 of the law Institutions designated as commissioned-service type quasi-governmental organization, not a quasi-governmental organization that manages funds. (except for small and strong institutions)	The Health Insurance Review and Assessment Service National Health Insurance Service Korea Trade-Investment Promotion Agency Korea Rural Community Corporation Korea Student Aid Foundation
	Small scale	Fund management quasi-government institution with a capacity of less than the prescribed number of employees 300 among the institutions designated by the provisions of Articles 4 to 6 of the Act. Institutions with less than 1 trillion won and the prescribed number of employees with fewer than 300 people (as of the end of 2017)	National Institute of Ecology Korea International Broadcasting Foundation Innopolis Foundation (The R&D Innovation Cluster of the Republic of Korea) Postal Savings & Insurance Development Institute Korea Employment Information Service

Source: Ministry of Economy and Finance (2019).

Table 6: Composition and Weighting of Management Performance Evaluation Indicators (Public Enterprises and Quasi-government Agencies)

2007		2008	2011		2014		2018	
Overall management		Leadership and strategy	Leadership/ Accountable management		Business management		Business management	
Quantitative	15(10)*	20	Quantitative	10	Quantitative	30(28)	Quantitative	21(19)*
Non-quantitative	20(25)*		Non-quantitative	10	Non-quantitative	20(22)	Non-quantitative	34(31*
Major business		Management system	Management efficiency		Major business		Major business	
Quantitative	15(19)*	35	Quantitative	17(15)*	Quantitative	32(30)	Quantitative	27(29)*
Non-quantitative	20(16)*		Non-quantitative	13(15)*	Non-quantitative	18(20)	Non-quantitative	18(21)*
Business management		Management performance	Major business		* Indicative scores for management efficiency of quasi-governmental institutions			
Quantitative	10(6)*	45	Quantitative	28				
Non-quantitative	20(24)*		Non-quantitative	22				

Source: Ministry of Strategy and Finance (2007–2018).

However, in 2011, the index was changed again to measure performance by clearly distinguishing between quantitative and non-quantitative indicators, and they were more clearly and simply divided into three categories: leadership and accountable management, management efficiency, and major business. From 2011, evaluation methods based on quantitative and non-quantitative indicators, which apply equally to all organizations, expanded. In particular, as debate on the importance of qualitative evaluation considering the characteristics of each company persisted, the proportion of non-quantitative indicators was greatly expanded. From 2014, assessment indexes were largely divided into two categories, management and major projects, excluding leadership and responsibility from the PE indicators for SOEs. The proportion of quantitative indicators has decreased, and the proportion of non-quantitative indicators has increased. Of course, differences in the composition of indicators may exist depending on the type and characteristics of the institution. In the case of major project evaluation indicators, the goals, weights, and directions of the agency may vary significantly in that they are selected through consultation between the Ministry of Economy and Finance and the agency.

However, some point out that the assessment of non-metric indices lacks objectivity and reliability, as opposed to change in the indicators of the PE system. In particular, indicators whose vague and subjective criteria, such as strategy and innovation, are criticized for the lack of prior definition of what they want to evaluate and the lack of clear criteria for detailed evaluation make it difficult to analyze the indicators and prepare the agencies in advance (Lim and Park 2010), and lack the basis for results. In other words, there is a limit to the evaluation because large-scale institutions can receive high scores irrespective of actual management and improvement efforts. In addition, the system for systematically verifying errors in the evaluation procedure is inadequate, and the subjectivity of the evaluation committee is inevitably involved, which may raise doubts as to the reliability and fairness of evaluation. As a result, the evaluation process of the evaluation committee is unofficially opaque, making it difficult for the organization to comply with the results. On the other hand, while objectivity can be secured in the case of quantitative indicators, there is limited reflection of the character of the institution. As a result, the weights of quantitative and non-quantitative indicators vary depending on whether they are given higher weights for objectivity, fairness, or professionalism (Jang

and Park 2015). Accordingly, the PE system for Korean SOEs has constantly been adjusted to reflect the unique characteristics of the organization.

Quantitative Indicators of Performance Evaluation

Quantitative PE evaluation methods using quantitative indicators have been steadily improved since 1983, as shown in Table 7, when the performance assessment of government investment management institutions was first introduced. The quantitative indicators for performance evaluation have seven methods: goal-performance comparison, tendency evaluation, β distribution, target suggestion, target deviation, comparison of global performance, and long-term goal suggestion (KIPF 2019). Only the goal performance comparison method and tendency evaluation method were used in 1983. Goal-performance comparison is a method that establishes indicators with an agreement between government and agency. The tendency evaluation system is a method that evaluates performance based on prior performance. In 1984, β distribution was introduced in order to overcome the weakness of tendency evaluation (KIPF 2019). The target suggestion method was adopted in 1986 to overcome the drawbacks of the tendency evaluation method. Then, after the AMPI was implemented in 2007, the deviation of the target suggestion (target deviation) was added on existed evaluation methods. The target deviation method adjusts the last year's performance with a certain standard deviation. In 2011, a global performance comparison method was introduced, which has been widened to create global best practice cases. Furthermore, the long-term goal suggestion method was included in 2013 to measure performance with big differences from global standards.

Table 7: Transition Process of Quantitative Indicator Evaluation Method (1983–2018)

Period	Classification	Evaluation Method
1983	Government-invested institution	Goal-performance comparison, tendency
1984–1985	Government-invested institution	Goal-performance comparison, tendency, β distribution
1986–2006	Government-invested institution	Goa-performance comparison, tendency, β distribution, target suggestion
2007	SOE	Goal-performance comparison, tendency, β distribution, target suggestion, target suggestion (deviation)
	QGO	Goal-performance comparison, tendency, β distribution, target suggestion
2008–2010	SOE, QGO	Goal-performance comparison, tendency, β distribution, target suggestion, target suggestion (deviation)
2011–2012	SOE, QGO	Goal-performance comparison, tendency, β distribution, target suggestion, target suggestion (deviation), comparison of global performance
2013–20182018	SOE, QGO	Goal-performance comparison, tendency, β distribution, target suggestion, target suggestion (deviation), comparison of global performance, long-term target suggestion

Source: Modified from KIPF (2019).

Qualitative Indicators of Performance Evaluation

For qualitative indicators, a more general assessment is performed first, followed by rating according to a predetermined rating system. Table 8 shows the changes in qualitative indicators of PE. The ADL (approach–deployment–learning) perspective was adopted during the period 2008–2010 when the MB model was applied. The ADL viewpoint was excluded from the 2011 SOE and QGO Performance Evaluation Manual due to the weakness of the vague and difficult to manipulate standard. After eliminating the ADL method, a general evaluation was conducted by comparing the last year's performance for qualitative evaluation. In 2011, in order to overcome the problem of inconsistency and lack of fairness, the PDCA (plan–do–check–act) model was introduced; it is still used for qualitative indicators in the performance evaluation process. To be more specific, a general evaluation is conducted and an evaluation grade given. Then, a converted score is given according to the section. The reason why the basic score system is applied is that giving a basic score enhances the fairness and adaptability of the PE result.

Table 8: Valuation Grade and Grade Section for Qualitative Indicators (1983–2018)

Period	Evaluation Section	Grade Section
1983–1984	Grade 3	High (97.5), Middle (87.5), Low (77.5)
1985–1995	Grade 5	Excellent (100.0), Good (93.75), Mediocre (87.5), Bad (81.25), Very bad (75.00)
1996–1997	Grade 9	A+ (100.00), A (96.87), B+ (93.75), B (90.62), C (87.50), D+ (84.37), D (81.25), E+ (78.12), E (75.00)
1998–2007	Grade 9	A+ (100.0), A (87.5), B+ (75.0), B (62.5), C (50.0), D+ (37.5), D (25.0), E+ (12.5), E (0.0)
2008–2009	Grade 6	S (95), A (85), B (75), C (65), D (55), E (30)
2010	Grade 6	S (100), A (90), B (75), C (60), D (45), E (30)
2011–2018	Grade 9	A+ (100), A (90), B+ (80), B (70), C (60), D+ (50), D (40), E+ (30), E (20)

Source: KIPF (2019).

Table 9 shows the method of calculating the score for the leadership indicator corresponding to the representative non-quantitative indicator. Leadership evaluates the CEO's leadership in terms of motivating workers, efforts and performance to implement the management contract, and operation of the board of directors. The professional evaluators of the PE committee classify the definitions of the leadership indicators and the detailed evaluation contents in consideration of the overall operational performance of the organization and the level of performance improvement over the previous year. Because of this evaluation method, unlike the quantitative indicators, the non-quantitative indicators have a problem of lowering the reliability of the evaluation, in that the evaluator can show subjectivity. To solve this problem, it is necessary to expand the gap in scores among assessment grades, reduce the proportion of non-quantitative indicators among PE indicators, and continually improve the evaluation method so that evaluators with expertise can assess the performance of public institutions as objectively as possible.

Table 9: Calculation for Non-quantitative Indicator

Evaluation Indicator		Detailed Evaluation Contents
Leadership	Definition	Evaluation of the CEO's leadership in terms of motivating workers, efforts and performance to implement the management contract, and operation of the board of directors
	Target (score)	SOEs and QGOs: two non-quantitative points
	Details	1) Efforts and achievements of the CEO to fulfill the objectives of the management contract, such as selecting CEO-supported management contract projects, and improving the appropriateness of the level of long-term and yearly goals and the linkage between management contract and performance indicators 2) Efforts and achievements of the CEO, such as sharing of the institution's core values and job innovation to motivate workers 3) Efforts and achievements of the CEO to facilitate and empower the operation of the board of directors

Source: Modified from KIPF (2019.

Comprehensive Evaluation Grade

The comprehensive score and scores by category are calculated by multiplying the score of each indicator by its weight value and then totaling the quantitative and non-quantitative scores. The score is then transformed to a score on the 100-point scale. The Ownership Steering Committee decides the final evaluation results by comparing the agency's performance to its previous performance, then giving the final grade following the standard in Table 10.

Table 10: The Six Grades of Comprehensive Evaluation Scores

Grade	Institution
Superb (S)	The institution has a systematic management system in all management areas, carries out effective management activities, and achieves a very high level of performance.
Excellent (A)	The institution has a systematic management system in most management areas, carries out effective management activities, and achieves a high level of performance.
Good (B)	The institution has a good management system in most management areas and achieves an acceptable level of performance.
Fair (C)	The institution has a fair management system in most management areas and carries out a fair level of management activities.
Poor (D)	The institution has a fair management system in a few management areas but achieves an overall unsatisfactory performance.
Very poor (E)	The institution lacks a systematic management system in most management areas, does not carry out effective management activities, and requires reform to achieve an innovation-oriented system.

Source: KIPF (2019).

4.3 Arguments: Autonomy vs Control

4.3.1 Government Control on PE for Korean SOEs

The overall direction of performance indicators, category, weighting, and management performance evaluation tends to vary depending on national policy or political considerations. In particular, there has been great change in the PE system based on the major project agendas of the first year of the term of office announced after a

presidential election. Table 11 shows these changes in the PE system and their characteristics by each government regime in the Republic of Korea.

Table 11: Overview of PE by Governments and Their Major Project Regime

Government	Kim Dae-jung (1998–2002)	Rho Moo-hyun (2003–2007)	Lee Myung-bak (2008–2010)	Lee Myung-bak (2011–2013)	Park Geun-hye (2014–2017)	Moon Jae-in (2017–2018)
Government Policy Keywords	Overall reform, Restructuring, Simultaneous pursuit of democracy and economic development, Customer-oriented and enterprise-based administration	Economic justice, Decentralization, Innovation, Improvement of the system of major government project	Growth-oriented, Pragmatism, People-friendly, Business-friendly		Growth-oriented, Happiness, Economy	Government for the people, Economy, Pursuing mutual prosperity, Justice and welfare, Decentralization
Evaluation Category	General management, Major project, Management efficiency, Management indicator	General management, Major project, Management	Leadership and strategy, Management system	Leadership and accountable management, Management efficiency, Major project	Management, Major project	Management, Major project
Typology of SOE	Construction and manufacturing, Promotion and service agencies	Construction and manufacturing I, Construction and manufacturing institution II, Promotion and service agencies	SOC Service		SOE I SOE II	SOE I SOE II
Typology of QGO	Inspection/ verification, Culture and national life, Industry promotion I and II, Education training, R&D, Pension and fund management	Inspection/verification, Culture and national life, Industry promotion I and II, Education training, R&D, Pension and fund management	Inspection/verification, Culture and national life, Industry promotion, Pension and fund management, Small and medium-sized organization		Fund-managed type, Commissioned-service type, Small and strong institutions	Fund-managed type, Commissioned-service type, Small and strong institutions
Quantitative indicators	45	40	45(2008) 50(2009) 55(2010)*	60	65	48***
Non-quantitative indicators	65	60	45(2008)* 50(2009) 45(2010)**	40	35	52***
Newly established indicators	12	15	29		15	
Newly established indicators related to major government project	12(100%)	11(73%)	27(93%)		14(93%)	

* The proportion of quantitative/non-quantitative indicators in 2008 was decided in December of 2007(the presidential term of President Rho Mu-hyun), but they were implemented in the presidential term of President Lee Myung-bak.

** The quantitative/non-quantitative indicators of the Lee Myung-bak administration were 45/45 in 2008, 50/50 in 2009, and 55/45 in 2010. The proportion of quantitative indicators steadily increased over three years.

*** Based on the management index of 2018, considering that President Moon Jae-in was commissioned in May 2017.

Source: Author.

Kim Dae-jung's government introduced some PE indicators under the national goal of overall reform, restructuring, and corporate governance, and all newly established indicators were introduced as part of the achievement of the national goal. After the establishment of the Roh Moo-hyun administration in 2004, the Framework Act on the Management of Government-Affiliated Institutions (FAMGAI) was enacted, in addition to the existing FAMGII on the management of government-invested institutions. Furthermore, the categories of evaluation were simplified, and the targets made more specific. Of the total 15 indicators newly established for PE, 11 were related to the national major project.

In 2007, the Lee Myung-bak administration announced the goals of 'the government-friendly government'. the government emphasized economic growth and efficiency, and PE improved according to the government goal. With the application of the MB model, starting with the PE system in 2008, the government organized performance indicators of the PE system focusing on internal factors such as leadership and management strategy. Furthermore, more efficient management evaluation was made possible by simplifying the target organizations, and more weight was placed on quantitative indicators than on non-quantitative indicators, based on qualitative assessment considering the characteristics of the institutions. A total of 29 new PE indicators were created during the Lee Myung-bak administration, of which 27 indicators (93%) are related to major national projects.

The Park Geun-hye administration showed a similar tendency to the Lee Myung-bak administration in terms of PE indicators. The Park administration focused on economic growth like the Lee administration; thus, PE indicators reflected characteristic of this government. In particular, the proportion of non-quantitative indicators, considering the characteristics of each institution in PE, decreased to 35 out of a total of 100 points; thus, most were evaluated according to measurable profitability indicators. However, PE indicators of the Park administration deviated from the existing MB model and presented detailed indicators for the two categories of business management and major business, and differed in that the target organization was simplified more than in the Lee Myung-bak administration. A total of 15 new indicators were established during the presidential term of Park Geun-hye, of which 14 were newly established in relation to the national task.

The fact that the performance index of public corporations depends on the policy objectives and political considerations of the government represented by the national agenda shows that public institutions still exist as a means of implementing government policies under government control. In addition, this clearly shows that PE is being used as a means of government control over public corporations rather than improving their performance. If the purpose of confirming the achievement of the government's policy objectives is excessive, the essence of the PE system, which should improve performance based on achievement of the purpose of establishing and operating the public institutions, can be undermined (Park 2014).

4.3.2 Evaluation without Considering the Differences among Institutions within the Same Group

In addition to the issue of government intervention or control, the Korean PE system for SOEs has problems such as classification of the evaluation group, an evaluation system that may not consider characteristics of individual institutions, securing reliability and conformity of evaluation results. These problems can be understood through Table 12 and Table 13.

First of all, it can be seen in Table 12 that there is a large difference between the minimum values and the maximum values for each group and the indicators that can affect the PE, such as the number of employees, the size of total sales, debts and assets, debt to equity ratio, net profit, grants from the government, and size of new employment. In other words, there is a considerable difference among institutions even within the same group, and it can be judged that it is necessary to improve the existing management performance evaluation system so that the characteristics of each organization can be taken into consideration.

Table 12: Characteristics of Public Institutions by Type of PE (as of 2019)

	SOEs						Quasi-government Organization					
	SOE I			SOE II			Fund Management-type			Commissioned Service-type		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Number of employees	3,980	220	22,695	3,367	97	29,814	1,693	172	7,472	923	60	15,057
Sales (bil.)	14,100	124.0	60,600	2,460.6	25.3	6,326.8	1,870.1	153.1	7,186.3	3,562.1	47.1	26,200
Debt (bil.)	10,500	2.2	109,000	3,181.1	3.8	20,100	12.2	2.7	32.0	7,040.5	1.5	131,000
Asset (bil.)	17,300	2.4	182,000	6,074.2	16.9	34,600	69.0	3.2	321.4	9,621.1	4.1	174,000
Debt ratio (%)	129.5	–423.8	1,411.4	–80.5	–1,083.5	140.9	–178.3	–1,760.8	488.9	1,280.5	–2,618.3	61,404.9
Net profit (bil.)	–193.4	–1,174.5	161.3	65.2	–226.5	289.3	40.5	–13.3	123.8	109.3	–1,159.5	2,076.7
Net worth turnover ratio (%)	75.6	–12.2	156.1	61.7	–97.3	159.4	1,113.3	7.1	3,952.5	563.8	–32.5	10,249.4
Grants (bil.)	6.1	0.0	47.9	247.3	0.0	1,505.8	2,483.5	0.0	21,400	356.3	0.0	8,339
Number of new hires	263	2	1,786	243	2	2	192	18	1,385	86	2	1,108

Source: Alio.

The need to improve the PE indicators considering the characteristics of individual institutions can be found in Table 13. As a result of classification of the industrial group of each institution for market-type and quasi-market-type SOEs, it is confirmed that the distributions of industries belonging to the same evaluation group appear differently. For example, institutions corresponding to SOE II can be reclassified into nine industries with totally different characteristics. According to the current PE system, public institutions that correspond to the transportation industry and public institutions belonging to the arts, sports, and leisure-related service industries are evaluated according to the same standards. Also, the purpose and vision appear differently among institutions belonging to the same industry group. Even if the proportion of non-quantitative indicators is enlarged, reliability and compliance to the evaluation result cannot be improved by grouping and evaluating organizations which have completely different characteristics according to the same standard. After all, it is necessary to improve the current PE indicators to resolve differences among institutions within the same group and to evaluate management performance more objectively.

Table 13: Public Institutions Classified by Industry Group (SOE I and SOE II)

Type		SOE I	SOE II
Industries	Electricity, gas, water and steam	Korea Gas Corporation Korea Southern Power Co., Ltd. Korea Southern Development Co., Ltd. Korea East-West Power Co., Ltd. Korea Western Development Co., Ltd. Korea Hydro & Nuclear Power Co., Ltd. Korea Electric Power Corporation Korea Midland Development Co., Ltd. Korea District Heating Corporation	Korea Gas Technology Corporation KEPCO E&C Korea Electric Power Knowledge Data Network Co., Ltd., KEPCO Plant Service & Engineering Co., Ltd
	Transportation	Incheon International Airport Corporation Korea Airports Corporation Busan Port Authority Incheon Port Authority	Korea Highway Corporation Korea Railroad Corporation SR. co., ltd. Yeosu Kwangyang Port Authority Ulsan Port Authority
	Mining industry	Korea Mineral Resources Corporation	Korea Coal Corporation
	Arts, sports, and leisure-related services	Kangwon Land Co., Ltd.	Grand Korea Leisure Co., Ltd. Korean Racing Society Jeju International Free City Development Center
	Manufacturing		Korea Minting and Security Printing Corporation
	Finance and insurance		Housing City Guarantee Corporation
	Real estate and leasing		Korea Appraisal Board
	Construction		Korea Land & Housing Corporation Korea Water Resources Corporation
	Professional, scientific, and technical services		Marine Environment Corporation Korea Broadcasting Advertising Promotion Agency

Source: Author.

5. CONCLUSION

The evaluation system for SOEs in the Republic of Korea has survived over 35 years of constant evolution since 1984. In the meantime, the role of the SOEs in the economy has been reduced and the private economy has grown up significantly. Nevertheless, the functions and roles played by SOEs in the Korean economy and administrations are still emphasized, and the importance of evaluation to enhance efficiency in management by measuring and feeding back the performance of SOEs is also under constant attention.

The SOE management system in the Republic of Korea has given too much power to the central governance agency (MOEF), which manages the PE system and corporate governance of SOEs, leaving little managerial autonomy for SOEs. Although SOEs' performance is very high by global standards, their efficiency has a good deal of room for improvement. The Republic of Korea needs to reduce government intervention by guaranteeing more autonomy for SOEs.

Not only was it difficult to measure the performance of SOEs clearly due to a large number of measuring indices and overlapping indicators, but delineating external factors from efforts by the agency in interpreting the improvement in management performance also complicated the process. There are some cases in which the evaluation results change due to environmental factors that cannot be controlled by the institution itself.

The secret behind more than 35 years of history of the evaluation system in the Republic of Korea lies in the harsh consequences of the evaluation results. There are two follow-ups of the evaluation results. First, MOEF recommends to the President of the Republic of Korea a discontinuation of the contract with the CEO if the CEO gets the lowest grade (E) out of the six levels (S, A, B, C, D, E). If they receive a D, they will be warned by the MOEF. If they are warned two years in a row, it is also recommended that they be discharged.

Secondly, each and every SOE employee, including the CEO, will receive an annual bonus payment depending on the results of the evaluation. Prior to the Government of the Republic of Korea giving this annual bonus based on the results of an evaluation, each SOE used to pay annual bonuses mainly based on seniority. The government, however, passed a law that the total volume of annual bonuses must depend on the results of the evaluation. Each SOE employee with an S grade will receive an annual bonus equal to 250% of their monthly basic salary, but one working for SOEs with a D or E grade will end up with 0%. This is why all employees and CEOs of SOEs in the Republic of Korea are so keen on their management evaluation.

A policy tool such as an evaluation system succeeds when it wins the minds of the people and political leadership, even though the current system has a number of problems, and relevant reform of the evaluation system is crucial for a more efficient economy and better service to citizens. In order to improve the performance of SOEs, autonomy in the operation should be guaranteed at the same time. The government's control and the autonomy of SOEs both work as key factors that affect the performance of the agency and the level of autonomy. All in all, a customized evaluation system is converged to take into account the characteristics of individual institutions and ensure the autonomy of their operations in order for SOEs to adapt to the rapidly changing economic environment while pursuing publicness and profitability as standardized indices and indicators.

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