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Analysis on Market Participation by Public Institutions

December 2013

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Introduction

Public institutions currently participate in various markets in order to generate profits. Some enjoy monopoly or oligopoly status while others maintain small market shares as suppliers. Regardless of their status in respective markets, market participation by public institutions generates competition with the private sector, which certainly results in narrowing opportunities for private enterprises. Furthermore, public institutions are more likely to hold an advantage over private businesses in terms of financing, regulations, and tax benefits. Therefore, the role of public institutions does not remain limited to merely helping the growth of the private market, but instead works as an obstacle in selecting a more efficient supplier. In addition, the soft budget constraints that public institutions often operate under tend to result in the excessive supply of respective goods and services in terms of quantity and quality. Although this excessive extent of service satisfies both the public institutions themselves as suppliers and the public as the beneficiaries, few are concerned with the costs of this excess. Such extravagance in public services is ultimately a waste of taxpayers' money.

Then what is the reason for public institutions to continue participating in the market? First of all, public institutions desire to be a part in the market, since market participation equates to the ability to generate funds. Another reason is that, even in cases where market participation is not profitable, with drawing from an enterprise already in the undertaking incurs significant pressure for the public institution concerned to engage in heavy restructuring. Meanwhile, the government tends to tolerate this situation for the fear of having to otherwise compensate for the loss of their earnings by finding an alternate source of revenue. Relevant ministries also willfully neglect this matter, regarding market participation by public institutions as an instrument to achieve policy objectives. Accordingly, private enterprises suffer losses in a number of ways, but hesitate to voice their objections for the fear of the influence held by public institutions. Under such circumstances, issues over public institutions' market participation are difficult to resolve.

The government must now deliberate seriously on who will be responsible for undertaking a policy project before it commences. Providers of public goods and services can be largely classified as the government, public institutions, non-governmental or non-profit organizations (NGO/NPO), and private enterprises. As a kind of service provider, the government acts in order to correct market failures or to provide public goods. The general principle of role allocation in this case dictates that tasks pertaining to actual implementation are delegated to public institutions, while profit-generating enterprises are taken on by the private sector. The role of NGOs occupies a domain in which neither the public nor the private sectoris engaged. In reality, however, the definition of the divided roles is not entirely clear.

This study aims to investigate the role of public institutions in the market, under consideration of the above-mentioned problems and circumstances. In particular, it concentrates on cases in which public institutions become engaged in direct or indirect competition with private enterprises for market share. This study attempts to categorize the businesses of public institutions according to the purpose of market participation, then present guidelines to assess the validity of market participation by each type of public institution, and further apply the guidelines to specific examples. This will allow an assessment of the validity of market participation by existing public institutions, and identify future directions for adjustments in the functional aspects of public institutions. In addition, this study is expected to provide principles and guidelines towards deciding whether to allow public institutions to initiate new enterprises of market participation.

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Type of Market Participation by Public Institutions and Alternatives

1 Theories of Market Participation by Public Institutions

A. Market Failure

The most credible economic rationale for market intervention from the public sector, including the government, public institutions, and state-owned enterprises (SOEs), is the danger of market failure. The market system serves as not only the best institutional tool to maximize social welfare in general but the most effective mechanism for the distribution of resources. However, driven by the law of supply and demand, the market might occasionally fail to maximize social welfare and instead distribute resources in an inefficient manner, which is the theory of market failure. Five types of market failure are often cited: public goods, externalities, imperfect competition, natural monopoly, and information asymmetry. Naturally, it is not that market failure always justifies direct market intervention by the public sector. For example, externalities can be corrected with taxes, subsidies or regulations. Thus, it is difficult to argue that public institutions or SOEs are the sole initiators of market intervention. On the other hand, the occurrence of market failures is demonstrative of the probability and external circumstances that are conducive to market intervention through public institutions.

B. Grounds in Relation to Economic Development and Industrial Policies

Market failure alone does not entirely justify intervention in the market economy by the government or public institutions. This is because the necessity for such public sector intervention can vary depending on diverse factors at each stage of economic development, such as the state's institutional maturity, the government's level of experience, the developmental stage of the national economy, and most importantly, the existence of private enterprises with a certain degree of competitiveness and scale. Thus, the theoretical grounds for market participation by the public sector can also be found in a nation's stage of economic development and necessity in terms of corresponding industrial policies.

If the private economy has a strong degree of potential through factors such as high income level and private enterprises with high competitiveness and size, the need and justifiability for the market participation of public sector actors will be significantly reduced, which is even more so the case when the country reaches a certain level of economic growth through a solid basis of social capital that serves as a pillar of national economic management, along with a mature system of rule of law and institutional strategies. In contrast, the inadequate development of legalistic mechanisms, insufficient reserve of human capital to operate the economy, and a weak foundation for the private sector economy are factors that inhibit the natural appearance of private enterprises in the market as the central actors of economic development. Under such circumstances, public institutions or SOEs are more likely to serve as the major economic players instead of private enterprises, depending on the stage of economic development.

Especially in the early stages of economic development, it is difficult for private enterprises to naturally develop in the national economy to operate public works such as electricity, water supply and drainage, railroad, and gas, all of which are essential to the public livelihood. At this phase, there is no choice but to have public institutions or government ministries assume direct responsibility for such public works. In addition, numerous fields require the government and public institutions as market participants, including healthcare and medical services, education, construction of social overhead capital (SOC), broadcasting, and transportation. Intervention through industrial policy varies in strength and direction, depending on the country's level of economic growth and industrial structure. It is common for the private economy to be limited in terms of potential and information power in the early stages of development. Therefore, the government must accordingly act in an interventionist manner and present a clearer direction through industrial policy. On the other hand, intervention via industrial policy eventually declines in a more developed national economy, as industries can lead development and progress without specific guidance and support from the government, through the self-driven momentum and ripple effect generated by the market economy.

2 Classification of Market Participation by Public Institutions and Alternatives

Functions of market participation by the wide range of existing public institutions can be classified by several standards two of the most useful criteria are whether the public institution in question serves the public interest or strives to generate profits. It might be argued that the two standards actually work as one since a function intended to fulfill public interest has no profitability.[1] According to analyses of cases in Korea, however, certain aspects of market participation for the purpose of public interest result in profit generation, while the vice versa is often the case as well.

The importance of determining whether a function of market participation is beneficial to the public interest lies in the fact that suspending a function of market participation with little benefit to the public interest does not require concern towards replacing the said function. However, if the said function is beneficial to the public interest, its suspension entails the pressure of finding

1) This viewpoint is shared by the OECD. Credit is due to the anonymous assessor who brought this to our attention.

〈Table II-1〉 **Classification of Market Participation Functions: Four Types**

	Low profitability	High profitability
High public interest	Type 1: Addressing undersupply To counteract a lack of suppliers due to low profitability discouraging private enterprises, the public sector receives government support to participate in the market for the public interest.	Type 2: Market regulation There are private enterprises in the market thanks to high profitability. However, due to concerns that private sector control might lead to the infringement of public interest in terms of service quality and price, the public sector becomes a market participant to counterbalance the market.
Low public interest	Type 4:Utilizing idle resources In case of low cost–efficiency but some supply of resources (facilities and human resources), the public sector participates in the market despite limited benefit in terms of both public interest and profit generation.	Type 3: Cross–subsidization The public sector conducts a business with high profitability in order to raise funds to cross–subsidize other public utilities and its operating expenses.

an alternative to take its place. The reason why profitability is a key standard of categorization is that, if a profitable business previously operated by a public institution is transferred to the private sector, the government bears the burden to compensate the public institution for loss of earnings incurred by suspension of the said business. In short, suspension of market participation requires an alternative function if it was highly contributory to public interest and alternative resources if it was highly profitable. As seen in the table below, functions of market participation can be divided into four types based on public interest and profitability. Among the four, the decision of suspension is the most difficult to reach in relation to Type 2, since it is high in both public interest and profitability, and suspending a Type 2 enterprise requires alternatives in terms of both the function itself and the resources expended.

A. Type 1: Function with High Public Interest and Low Profitability (To Address Undersupply)

Type 1 refers to market participation activities with recognized benefit to the public interest, but whose low profitability might result in undersupply if left entirely to the free market system. In this case, the government attempts to readjust the supply by subsidizing a public institution. The subsequent suspension of market participation might enable the public institution to achieve financial independence or even financial improvement, since the said market function did not originally endeavor to generate profits and the government subsidies are often insufficient. Subsequently, the public institution concerned must suffer the consequence of having to downsize the organization responsible for the function being suspended.

Furthermore, purposes in terms of public interest can be subdivided into two types. First, Type 1-1 refers to forms of market participation that the government has to perform by necessity as a part of social policy, in spite of no prospects for profitability in the short- and long-term. Most of these businesses do not spontaneously emerge but are generally designed by the government for the purpose of protecting the socially vulnerable. There fore, it is likely for regulations to encourage such services to be offered at a low price. One example is the rental housing business run by the Korea Land and Housing Corporation (LH), in which the public institution sets the rent at a low rate for the low-income bracket despite the burden of growing debt. As an alternative to this function, a voucher scheme or minimum subsidy bidding system can be considered. The voucher scheme provides subsidies directly to the consumers and allows the option to choose among private suppliers. Under the minimum bidding system, the government grants the role of supplier to the bidder that requires the lowest minimum subsidy through competitive bidding between public institutions and private enterprises. Although the Korea Education and Research Information Service's online education information service EDUNET falls under Type 1-1, its alternative is different from that of the LH's rental housing. This stems from the characteristic difference between the two: rental houses are private goods while the services of EDUNET are public goods. Since public goods are non-excludable, controlling consumer demand through a voucher scheme is not a viable option. However, the method of selecting a private business via the minimum bidding system may remain a valid alternative.

Type 1-2 refers to market participation businesses with the purpose of implementing industrial policy, in which the government participates in the market to resolve problems arising from imperfections in the financial market. It can be subdivided into two cases. First, the government intervention is aimed at protecting infant industries. One such example includes financial support for small- and middle-sized enterprises (SMEs). Although issuing loans is initially the role of private financial institutions, public institutions engage in the business of providing financial support for SMEs facing difficulties in securing loans due to lower credit ratings in comparison to large companies. Recently, the government is transitioning from the traditional method of having a public institution directly assume responsibility for allocating loans, towards an indirect method of commissioning loan-related business functions to private financial institutions while subsidizing interests.

When the need for a massive initial investment or high uncertainty inhibits private enterprises from participating in the market, the government occasionally presents itself as a project operator according to a long-term blueprint to develop the industry. In this particular case, the market failure is caused by high uncertainty in the short- and long-term in spite of high profitability in the long term. In the early stages of economic development in Korea, the government established SOEs for steel and communication businesses as instruments of industrial development policies. In this context, the overseas resource development business is carried out by the Korea Resources Corporation (KORES).

B. Type 2: Function with High Public Interest and High Profitability (For Market Regulation Purposes)

In Type 2, high profitability enables adequate supply in the market without the need for government intervention. However, the problem surfaces in the quality and price of supply, rather than the quantity. The underlying logic for government intervention in this case is that, since private enterprises under sole market supplier status may provide an unacceptably low standard of quality or high price level, such influences from private enterprises must be mitigated by a public institution. This type is perhaps the most attractive to public institutions, because Type 2 businesses are profitable enough to serve as the main source of income, even when the public institution is participating in the market primarily for the public interest.

Type 2 can also be subdivided into two parts according to quality and price. First, Type 2-1 refers to market participation whose absence would cause a problem of supply quality. This issue is generated by asymmetric information between suppliers and consumers. A prominent example is the function of vehicle inspections conducted by the Korea Transportation Safety Authority (TS). The TS shares the vehicle inspection market with private enterprises with the purpose of preventing private businesses from weakening the inspection regime by pandering to car-owners and allowing lax examinations. This is due to asymmetric information, a situation in which the vehicle owner possesses information on the car that the government does not. A similar case is observed in the cadastral survey service by the Korea Cadastral Survey Corp (KCSC). When the private sector is exclusively responsible for cadastral surveys, it might provide favorable survey results at the client's behest, which increases the potential for subsequent disputes. The KCSC's participation in the survey market aims to prevent such a dilemma. Meanwhile, private businesses as the only market participant may fail to provide services that meet customer expectations, which leads public institutions to participate in the market to correct the problem. This problem arises when it is difficult for consumers to evaluate the quality of the service whereas the provider is well informed. For example, although industrial accident hospitals are somewhat complex in terms of their function towards public interest, they also aim to improve service quality for patients suffering from industrial accidents.

Public institutions' market participation requires the in-depth review on whether it has a market control function as originally intended and whether such control is justifiable. Even after passing this stage, the question must thenbe asked as to whether there are other ways to regulate the market. For example, public institutions may conduct quality evaluation or supervise the service provided by private enterprises, instead of direct market participation. This alternative may be more effective in influencing private providers.

Second, Type 2-2 refers to businesses whose absence would cause the problem of high prices for goods and services. When private enterprises establish a monopoly position to restrain market competition, prices may be set at a higher rate than in a competitive market. Against this backdrop, the government intervention takes place with the aim of maintaining a competitive price to counteract the private sector monopoly and stabilize price levels. The economical gas station business operated by the Korea National Oil Corporation (KNOC) is a representative example. As the oligopoly occupied by existing gas station operators have driven gas prices high, the KNOC launched the said project to mitigate gas station operators by distributing gas at a lower price. For similar reasons, the Korea Electric Power Corporation (KEPCO) and the Korea District Heating Corporation (KDHC) have remained state-owned enterprises; they serve as market participants to prevent natural monopolies established by the private sector.[2] In the case of Type 2-2 businesses, the top priority is to foster competition in the market at the cost of allowing market participation by public institutions. Stimulation of competition in the private market is the desirable solution to imperfect competition.

C. Type 3: Function with Low Public Interest and High Profitability (For Cross-subsidization Purposes)

Type 3 operates under the positive cause that the profits generated from the said type of businesses are used to cross-subsidize other public projects, even if the business itself holds relatively low public interest. Although the public interest in this case may be ambiguous, the public institutions responsible for such enterprises often insist upon some benefit to the public good. Since the business is likely to be a central source of income to the public institution concerned, termination of the business would incur fierce resistance as in Type 2.

There are also two subtypes in Type 3. Type 3-1 refers to market participation businesses whose profits are directly allocated to other public projects. For example, the duty-free stores operated by the Korea Tourism

2) There is a key difference between the economical gas station scheme and the cases of the KPEC and KDHC: The KNOC uses the economical gas station project to play a minor role for market control in a market dominated by the private sector, while the KEPC and KDHC serve as a dominant player in the market.

Organization (KTO) had monopolized the business until 1998. Although the market was later introduced to competition, only later comers were engaged in competition on the premise of the KTO's participation. According to the public institution modernization plan initiated by the Lee Myung-bak administration, however, the KTO's vested rights are no longer recognized and the public institution has to engage in fair competition with other private enterprises regarding all duty-free shops with no exceptions. This development has faced strong opposition from the KTO. The KTO stresses its benefit to the public interest in providing marketing channels for products offered by SMEs. In reality, however, its concern is over the potential impact on the tourism promotion business that might result from reductions in earnings of the duty-free shop business, which is largely because the fiscal authorities are highly unlikely to allot a greater budget to compensate for the KTO's loss of profits. Even though the government might provide financial assistance, the KTO still has a problem to solve: maintaining jobs for employees at the Duty-Free Business Department and duty-free shops. The same is true for the housing for sale offered by the Korea Land and Housing Corporation (LH). The LH has continued to operate the business by justifying it as providing a financial resource for the rental housing business, although the LH competes with the private sector in the market.[3] In principle, it is wrong to allow public institutions to participate in the market and make profits that are then spent on other public projects, which would generally be funded by the national treasury. If the government begins to secure financial resources by encroaching upon private sector markets as opposed to relying on tax revenue, it becomes less conscious of costs and impartial evaluation as to the necessity of the public project becomes difficult.

Type 3-2 refers to market participation activities whose profits are allocated towards the operating expenses of the public institution rather than

3) In 1998, the Government Reform Office of the Planning and Budget Committee concluded that the LH's housing for sale business infringes on the private market and made the decision to suspend the business. However, this decision was met with opposition from the budget subcommittee under the same committee. The budget subcommittee argued that the suspension of profitable pre-sale housing business would require greater budget allocation for the rental housing business, which is not profitable by itself. Considering the difficult state of national finance at the time in the immediate aftermath of the financial crisis, the housing for sale enterprise was kept intact.

on other public projects, although this is not common. Categorized in this type is the education business conducted by the Korean Standards Association (KSA). The KAS's education and consulting services account for approximately 90 percent of its total revenues while government subsidies and commissioned projects are responsible for just 10 percent. Generated from market participation, its own revenues are mostly spent on operating expenses and personnel expenses. In this case, rather than discussing the suspension of market participation, the question should be asked as to whether the KAS should continue to operate as a public institution.

D. Type 4: Function with Low Public Interest and Low Profitability (To Utilize Idle Resources)

Type 4 features both low public interest and low profitability, which makes it difficult for public institutions to justify the operation of Type 4 businesses. Nevertheless, this type of enterprise remains in operation due to its utilization of idle facilities (Type 4-1) or idle human resources (Type 4-2).

Type 4-1 refers to market participation activities that aim to put idle facilities to use. One such example is the conventions business. Public institutions maintain and operate convention centers for public interest at times, but as they are not in constant use, idle facilities can be utilized to generate profits. Although such a business may seem profitable since revenues from a convention center generally exceed its operating expenses, it is difficult to construe it as being profitable when considering the initial cost regarding the construction of convention centers. It can be argued that the said construction costs comprise sunk costs and the business only requires the recuperation of variable costs to be considered profitable. However, the buildings of convention centers should not be treated as sunk costs, and selling them to private enterprises should be reviewed as an alternative. Type 4-2 refers to market participation activities that are designed to keep idle human resources in use. The Korea Coal Corporation (KOCOAL) is accounted as a key example. KOCOAL has witnessed high personnel expenses as a factor behind its low profitability, and persistence of annual deficits encroaching on its capital reserves. Furthermore, the business under the purview of KOCOAL is no longer seen as serving the public interest. If KOCOAL was a private enterprise, it would be subject to liquidation. It continues to operate as a public institution due to the difficulties of dismissing employees.[4] The solution to Type 4-2 is restructuring idle human resources. For cases such as KOCOAL whose key business is subject to restructuring, liquidation or privatization may eventually become the ultimate solution.

<Table II-2> illustrates the aforementioned four types, eight subtypes, examples for each type, and alternatives to market participation. Each alternative will be discussed in detail in the next chapter.

〈Table II-2〉 **Eight Types of Market Participation Functions**

Characteristics	Type of market participation		Effect of market participation	Example institution (business)	Alternatives
High public interest	Type 1 Addressing under-supply (no profitability)	Type 1-1 Achieving goals of social policies (no profitability in a short- and long-term)	Supplying private goods at low prices	Korea Land and Housing Corporation (rental housing)	Voucher scheme/ minimum subsides, Competitive neutrality
			Supplying public goods at low prices	Korea Education and Research Information Service (on-line education information service)	
		Type 1-2 Achieving goals of of industrial policies (long-term profitability)	Supporting infant industries	Small and Medium Business Corporation (policy loans for SMEs)	Dramatic decrease in direct investment, Support ofthe private sector (businesses/banks)
			Investing in businesses with high uncertainty	Korea Resources Corporation (overseas investment)	

4) Interest of some local communities, as well asthat of its 1,700 employees, depend on KOCOAL.

〈Table II-2〉 **Continue**

Characteristics	Type of market participation		Effect of market participation	Example institution (business)	Alternatives
	Type 2 Market regulation (Profitability)	Type 2–1 Addressing information asymmetry	Correcting private sector's service distortion at customers' request	Korea Transportation Safety Authority (vehicle inspection)	Transfer to the private sector, Supervising function, Competitive neutrality
			Preventing provision of service whose quality falls short of customers' expectations	Korea Workers' Compensation and Welfare Service (industrial disaster hospital)	
		Type 2–2 Addressing imperfect competition	Preventing existing private monopoly	Korea Oil Corporation (economical gas station)	Promoting competition, Privatization
			Preventing possibility of private natural monopoly	Korea Electric Power Corporation (electric power supply)	
Low public interest	Type 3 Cross-subsidization (profitability)	Type 3–1: Using profits as resources for other public utilities		Korea Tourism Organization (duty-free shop)	Alternative resources, Competitive neutrality
		Type 3–2: Using profits mostly for operating expenses of the public institution		Korean Standards Association (education business)	Designation cancellation, Competitive neutrality
	Type 4 Use of idle resources (no profitability)	Type 4–1: Use of idle facilities		Korea Agro-Fisheries and Food Trade Corporation (aT center)	Sale of facilities
		Type 4–2: Use of idle human resources		Korea Coal Corporation (coal business)	Liquidation/ phased restructuring

Ⅲ

Market Participation by Public Institutions and Competitive Neutrality

1 Concept and Principles of Competitive Neutrality

The concept and application of competitive neutrality began to be more fully discussed through the OECD Working Party on State Ownership and Privatisation Practices. In OECD meetings since 2010, the necessity and importance of competitive neutrality have been officially underlined (OECD, 2012). In many OECD member countries, SOEs currently participate in the market to engage in actual or potential competition with private enterprises. Participating in the market, SOEs are often granted certain advantages by the government, which could restrain fair competition.

The OECD defines competitive neutrality as the situation "where no entity operating in an economic market is subject to undue competitive advantages or disadvantages" (OECD, 2012). Specifically, competitive neutrality among SOEs constitutes a conceptual stand against the unfair advantage granted to SOEs through the legal or financial authority of the government. Such advantages enable SOEs to lower the cost of supply and there by provide goods and services at lower prices than in the free market, which results in distortion of competition and confusion in the market. Therefore, the principles of competitive neutrality call for the curtailment of discriminatory advantages, including all kinds of subsidies and tax exemptions given to SOEs. The aforementioned concept of competitive neutrality is the main context of the OECD Guidelines on Corporate Governance of State-Owned Enterprises. This is fully consistent with the principles of the "competition-oriented free market" as stressed in the Monterrey Consensus and the "level playing field" from the OECD Principles of Corporate Governance (OECD, 2011).

SOEs often hold a prominent position in market competition not because of greater productivity or management efficiency in particular, but rather as the result of the advantages available to companies owned by the government. As mentioned earlier, SOEs enjoy a competitive edge with low production costs resulting from tax exemptions, regulatory derogations and subsidies given by the government. Another benefit is the ease of access to cheap credit, since public institutions are subject to the same credit rating as the government and receive loans at below-market interest rates. There are numerous other incentives open to SOEs in terms of regulations and public procurement. SOEs receive preferential treatment in licensing and permission and are exempt from certain regulations. Public procurement practices have also been pointed out as an area in which OECD countries confer discriminatory advantages to SOEs. It is difficult to expect fair competition in public procurement bidding, given the outstanding information advantage and insider network available to SOEs (Park Jhung-soo *et al.*, 2011).

SOEs are often recognized or awarded exclusive rights in the market, especially in the network industry where a natural monopoly occurs. SOEs there fore hold a stable position in the market while being free from competitive pressure. They are less likely to face market pressure as government guarantee removes any risk of insolvency.

2 Case Studies of Competitive Neutrality in Market Participation by Public Institutions

In Korea, there is yet to be a serious discussion on competitive neutrality between private enterprises and SOEs. Furthermore, competitive neutrality is not yet being supported by specific measures, systems, policies, or programs.

With regards to Korean legislation on competitive neutrality, the Monopoly Regulation and Fair Trade Act applies to all commercial activities conducted by public institutions as a business operator. In reality, the Monopoly Regulation and Fair Trade Act and the Act on the Management of Public Institutions do not allow either SOEs or public institutions to be exempted from the Monopoly Regulation and Fair Trade Act.

Since the 1980s, the policy on SOEs' market participation focused on natural monopoly and public interest in the public sector, and SOEs' commercial activities were not considered to be subject to the Monopoly Regulation and Fair Trade Act. In the 1990s, however, growing interest in regulatory reform and privatization resulted in the reform of the public sector and strict enforcement of the said Act towards SOEs. The initial role of the Fair Trade Commission focused on discovering unfair transactions or abuse of status by SOEs. After the financial crisis of 1997, however, the commission altered its direction to concentrate on presenting policy directions regarding privatization while improving market structure and environment in preparation for the privatization of SOEs.

SOEs in Korea are often the sole market participant in a field, which hinders an in-depth discussion of competitive neutrality. Further privatization and market liberalization are expected to invigorate discussion on the topic.

A. Analytical Method of Competitive Neutrality and Subject

This study attempts to identify eight businesses in each type of public institutions' market participation and analyze the extent of their compliance with competitive neutrality principles. In order to assess whether each business is subject to competitive neutrality and complies with its principles, the study adopts the assessment method used in Australia to evaluate competitive neutrality.

Australia's approach of analyzing competitive neutrality consists of two stages: first, determining whether competitive neutrality is required and applicable for the business in question and second, if the business is subject to competitive neutrality, whether there are any violations of the principle of competitive neutrality. A business is considered subject to competitive neutrality if it meets the following criteria: first, consumers must be charged a price for the relevant goods or services; second, there must be an active or potential competitor in the field; and third, the public institution involved has a degree of independence in relation to the supply and pricing of its goods or services. If all three conditions are satisfied, then the business is subject to competitive neutrality. In order to apply the principles of competitive neutrality, however, the business's significance and cost effect of competitive neutrality application should be taken into account.

If the business is determined to be subject to competitive neutrality after undergoing the phased assessment process mentioned above, then its compliance with competitive neutrality principles is analyzed in accordance with eight criteria proposed by the OECD: 1) Separation of commercial and non-commercial activities, and corporation status for responsible institution 2) clear categorization of costs required by the business, and proper distinction between shared costs and assets required by the business; 3) analysis of whether the public institution's rate of return (ROR) is equivalent to that of private sector businesses 4) transparent use ofthe budget allotted for public service obligations (PSO), occurrence of cross-subsidization, and separation of accounting for each business 5) application of the same tax base to the public institution as its private competitors; 6) identification of any regulatory advantage or disadvantage; 7) identification of favorable treatment in accessing credit, such as lower interest rates due to its status as a public institution; and 8) whether it receives preferential treatment in the process of public procurement.

In order to analyze the abovementioned factors, in-depth interviews were carried out with officials in charge of each of the eight public institution enterprises, with additional material collected and further interviews conducted for necessary supporting evidence.

B. Analysis of Application of Competitive Neutrality

The table below shows the results of analyzing the applicability of competitive neutrality on the market participation of eight public institutions. Of a total of eight target businesses, five were assessed to be subject to competitive neutrality, except for the Korean Land and Housing Corporation's rental housing, the Korea Resources Corporation's overseas resource development, and the Korea Coal Corporation's production and sale of anthracite coal.

〈Table III-1〉 **Analysis of Applicability of Competitive Neutrality**

Public institution	Business	Necessity of competitive neutrality			Standards for applicability of competitive neutrality	Determina–tion of application of competitive neutrality
		Charging fees or prices on consumers	Existence of active/potential competitors	Independence in supply and pricing	Significance of business	
Korea Land and Housing Corporation	Rental housing	○	○	×	—	×
Korea Resources Corporation	Overseas resources development	○	○	×	—	×
Korea Transportation Safety Authority	Vehicle Inspection and maintenance	○	○	○	○	○
Korea National Oil Corporation	Economical gas station	○	○	○	○	○
Korea Tourism Organization	Duty–free shop	○	○	○	○	○
Korean Standards Association	Education business	○	○	○	○	○
Korea Agro–Fisheries and Food Trade Corporation	aT center operation	○	○	○	○	○
Korea Coal Corporation	Anthracite production and sale	○	○	×	—	×

Rental Housing Enterprise of the Korea Land and Housing Corporation (LH)

The LH's rental housing enterprise meets the first criteria for competitive neutrality since its customers are charged a rental fee. The business is categorized into permanent rental, national rental, and public rental, based on factors such as tenant requirements, rent fees, and conversion of rental housing for sale. Providers of such rental houses include the state, local governments, local public institutions established for the rental housing business, and private enterprises that are in active and potential competition with the LH. However, there are certain obstacles that prevent the private sector from entering into the rental housing market; because permanent and national rentals are unprofitable while 10-year public rentals require a long time for returns on the initial investment. As a result, the LH accounts for 80 percent in the supply of permanent and national rental housing while local public institutions make up for 20 percent. As for 5-year public rental housing, the LH was previously engaged in competition with private builders, but has ceased the construction of 5-year rental housing since the Roh Moo-hyun administration, which is the reason for the lack of competition between the private and public sectors in this particular field. However, 10-year public rental housing built by the public sector and 5-year rental public rental housing built by the private sector require the same tenant requirements, and there fore the LH is in de facto competition with private construction companies.

In terms of the supply of goods and services, the rental housing business is regulated on aspects such as the supply scale and tenant requirements, in accordance with government policy such as the comprehensive housing plan and real estate market measures as well as the Rental Housing Act. Furthermore, the LH is limited in its independence to determine supply and pricing of rental houses, as it has to comply with specific standards for leasehold deposits and rent as specified by the Ministry of Land, Infrastructure and Transport. Therefore, it is difficult to conclude that the LH's rental housing enterprise isin free market competition and requires competitive neutrality. Regarding the LH's public rental housing, however, competitive neutrality must be considered by closely examining regulations over supply and pricing, since the business is in de facto competition with the private sector.

If the LH transitions from its current business method of direct construction and management of rental housing to a voucher scheme or minimum subsidy bidding system, which is then followed by the aggressive market entry of more private sector competitors, then regulations on the supply and pricing of rental housing may become more relaxed. In that case, the rental housing business may become subject to competitive neutrality principles.

Overseas Resources Development of the Korea Resources Corporation (KMRC)

The KMRC's overseas resources development business is designed to acquire mining claims overseas to excavate and sell minerals, for which consumers are charged a price. The public institution is in competition with private resource development corporations that also develop mineral resources overseas. On occasion, the corporation establishes a consortium with private enterprises or takes the lead in undertaking a high-risk project in which the private sector is reluctant to invest. Its business goals are set in accordance with the National Program for Overseas Resources Development established by the government every three years, in which independent development rates for strategic minerals are set annually and allotted to SOEs. As such, the KMRC is given a low degree of independent decision-making power on supply, and therefore is not applicable to competitive neutrality.

Vehicle Inspection and Maintenance of the Korea Transportation Safety Authority (TS)

The TS's vehicle inspection and maintenance business is engaged in competition with the private sector with regards to periodic and general inspections for automobiles, for which consumers are charged a fee. The TS has currently 57 vehicle inspection centers and 60 on-call inspection centers, which are responsible for 30 percent of total vehicle inspections in Korea, while the remaining 70 percent of inspections are carried out by private inspection centers. The 117 TS inspection centers are in active competition with around 1,611 private inspection centers. TS vehicle inspection centers are given the authority of independent decision on providing the vehicle inspection service, and since 2003, the relevant law was revised to authorize the TS to independently determine service fees. Since then, public inspection centers have maintained a similar charge with those in the private sector. Therefore, the vehicle inspection and maintenance business is deemed to require the application of competitive neutrality. The revenues from vehicle inspection stood at 98.6 billion won as of 2012, accounting for 38.3 percent of the TS's total revenues (257.3 billion won). Taking into consideration the business's scale and proportion of revenues, the business can be recognized to be of substantial significance. Consequently, it is determined that the business needs application of competitive neutrality principles.

Economical Gas Station of the Korea National Oil Corporation (KNOC)

The KNOC's economical gas station business aims to stimulate gas price competition by jointly procuring oil products from oil production companies and securing low-priced oil products from sources other than oil companies. Economical gas stations purchase and pay for oil products supplied by the KNOC. The KNOC engages in market competition in order to improve the domestic oil distribution structure, which is dominated by four major oil refineries, and thus it is engaged in actual competition with the private sector. Although the government announced its plan to increase the number of economical gas stations up to approximately 1,300 (10 percent of total gas stations) nationwide by 2015, the supply amount and price of oil products offered at the economical gas stations are largely deemed to be the independent decision of the KNOC. Consequently, the business can be said to be in need of application of competitive neutrality. The economical gas station business is assessed to be of significance as it was allocated 174.3 billion won in the 2013 budget and its total sales made up around 8.0 percent of the total sales of gasoline and diesel in Korea.

Duty-Free Shops of the Korea Tourism Organization (KTO)

In the KTO's duty-free shop enterprise, customers at duty-free shops pay for duty-free products. Since 2008, large companies' entry into the duty-free shop business has introduced a competitive structure. As of 2010, the KTO has just five duty-free shops of a total of 28 duty-free shops. The KTO engages in an actual competition with private duty-free enterprises and works as an independent decision-maker in terms of the supply and pricing of duty-free products. Thus, competitive neutrality principles can be applied to the KTO's duty-free store enterprise. The significance of the enterprise is evident in the fact that the five duty-free shops in Korea recorded 206.4 billion won in total sales and 15.1 billion won in profits in 2012. Its total sales in 2012 (206.4 billion won) accounted for more than 50 percent of the KTO's earnings in 2012 (404.3 billion won). The duty-free shop business is therefore deemed significant and consequently warrants the application of competitive neutrality.

Education Business of the Korean Standards Association (KSA)

The KSA's education business aims to cultivate an excellent industrial workforce, whereby institutions and individuals pay for the education services they receive. Except for training on industrial standardization which is exclusively delivered by the KSA in accordance with the Industrial Standardization Act, the KSA's education business is in actual competition with the private sector in several aspects such as public education, corporate in-house education, government-supported education, and distance education. In terms of the provision and pricing of education courses, the KSA has the authority to make independent decisions, and therefore requires considerations of competitive neutrality.

As for the significance of the business, sales for the education business stood at 67 billion won in 2012, accounting for 68.5 percent of the KSA total sales (97.9 billion won). Consequently, its significance is acknowledged and thus the application of competitive neutrality principles to the business is deemed necessary.

aT Center Business of the Korea Agro-Fisheries and Food Trade Corporation (aT)

Since its opening in November 2002, the aT center of the Korea Agro-Fisheries and Food Trade Corporation has initiated the business of renting its exhibition halls and conference rooms, for which customers pay the appropriate usage fees. The center is in actual competition with similar facilities in the vicinity, both small private convention centers and large-scale facilities such as COEX and SETEC. The decision on the rental and pricing of aT center facilities is left to the discretion of the corporation, therefore the aT center rental business requires the application of competitive neutrality.

In terms of the significance of the business, its sales stood at 7.4 billion won in 2012, accounting for 3.1 percent of the aT's total sales (234.93 billion won). Despite its low share in the total sales, the business is acknowledged to be significant in terms of the sale volume and serves as one of aT's key businesses. As a result, the application of competitive neutrality principles is deemed necessary for the aT facility rental business.

Anthracite Production and Sale of the Korea Coal Corporation (KOCOAL)

Since the foundation of KOCOAL in 1950, the production and sale of anthracite have long been its flagship enterprise. The anthracite business is highly significant for the corporation, considering that the number of employees in coal production accounted for as much as 95 percent of its total workforce. The anthracite production and sale business is designed to extract and sell coal products, which generates revenues from sales to various customers. The profits from the business currently reach 175.9 billion won or 92.8 percent of the institution's total sales. At present, only two private mines remain in market competition, the decline of the coal industry has led to its overall downsizing, and the market itself has shrunk due to the increase in coal production costs resulting from the gradual deepening of mines. The supply of coal for residential and commercial use is controlled by KOCOAL while the supply of thermal coal is largely directed by the government. In addition, coal prices are determined pursuant to Article 2 of the Price Stabilization Act and the Notification of

Designating Maximum Sale Prices of Anthracite Coal and Briquettes, and in accordance with Article 4 of the Enforcement Decree of the said Act. Therefore, KOCOAL has no independent decision-making authority and so its business is not viewed as subject to the application of competitive neutrality.

〈Table III-2〉 **Compliance to Competitive Neutrality**

Competitive neutrality	Korea Transportation Safety Authority	Korea National Oil Corporation	Korea Tourism Organization	Korean Standards Association	Korea Agro-Fisheries and Food Trade Corporation
	Vehicle inspection and maintenance	Economical gas stations	Duty-free shops	Education business	aT center business
Separation of commercial and non-commercial activities, corporatization	○	○	○	○	○
Identifying cost for commercial and non-commercial activities, separate accounting	×	×	×	×	○
Establishing appropriate rate of return	○	×	○	○	○
Transparency of PSO budget spending, ban on cross-subsidization	×	×	×	×	○
Tax neutrality	○	×	○	○	○
Regulation neutrality	△	○	×	○	○
Debt neutrality	NA	NA	NA	NA	NA
Procurement neutrality	NA	NA	NA	×	NA
Compliance with competitive neutrality	×	×	×	×	○

C. Analysis of Competitive Neutrality Compliance among Public Institutions' Market Participation Businesses

The table below presents the study of compliance with competitive neutrality among the market participation activities of five public institutions. Out of the five, only the aT center business is determined to relatively better comply with competitive neutrality while the other four businesses are found to be at risk of violating competitive neutrality principles.

Of the five public institutions, only the Korea Agro-Fisheries and Food Trade Corporation separated commercial activities in its accountancy. As for the other four institutions, the failure to separate the accounting for each component business resulted in the acute difficulty to gain a transparent view of the costs required for commercial and non-commercial activities. In addition, the high likelihood of cross-subsidization has resulted in profits generated from commercial activities being used to subsidize non-commercial activities.

Furthermore, most institutions were found to enjoy various advantages by using their position as state-owned entities. In order to operate its economical gas station business, the Korea National Oil Corporation (KNOC) receives government subsidies for facility conversion costs and tax exemptions for the economical gas station, which are also allowed to use existing KNOC facilities for free or at a low cost. The Korea Tourism Organization runs its five duty-free stores through a private contract. Since the Korean Standard Association is responsible for KS certification, it faces the advantage of more easily collecting trainees for diverse education courses as well as education on Korean Standards (KS education).

The KNOC is the only public institution among the five that does not adopt an appropriate rate of return as a baseline for its pricing strategy. The public institution's economical gas station business responded that its prices were based on cost maintenance and thus the business generated no profits at all or negligible profits. Thus, its rate of return is significantly lower than that of private oil companies. If the KNOC does not reflect appropriate profits in prices and continues to set prices below the market-determined level, this is highly likely to cause market disturbance. The economical gas station was introduced with the aim of reducing gas prices, which may add to the image of impropriety that the public institution is pursuing higher profits. However, accepting profits at a much lower level than in the market may adversely affect the market order and fair competition in the long term.

According to the results of analyzing five target businesses based on eight standards suggested in the OECE Competitive Neutrality Guidelines, most public institutions with the exception of the Korea Agro-Fisheries and Food Trade Corporation failed to adhere to the principles of competitive neutrality. This is because each public institution in Korea is established under separate legislation and charged to perform both commercial and noncommercial activities. Cross-subsidization is prevalent in most public institution as a way to use profits from commercial activities to fund noncommercial activities. As noncommercial activities mostly aim to benefit the public interest or are conducted on behalf of government projects, public institutions implicitly take their advantages for granted.

Interestingly, most public institutions responded that they faced stricter regulations than the private sector, when surveyed regarding the criteria of regulatory neutrality in the analysis of competitive neutrality. This response is perhaps reasonable in light of the fact that public institutions are under the supervision of the National Assembly, the Board of Audit and Inspection, relevant ministries along with the supervision and assessment of the Ministry of Strategy and Finance. However, it should be noted that these institutions enjoy a more favorable regulatory treatment than their private counterparts in aspects such as licensing and permission.

IV

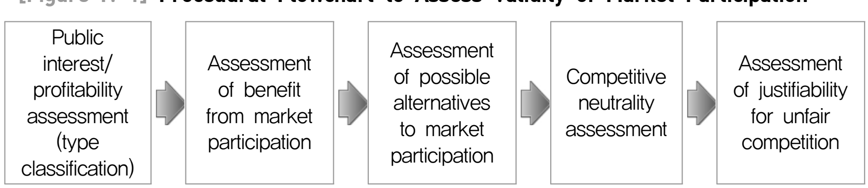
Case Studies of Market Participation by Type

1 Validity Assessment Method for Market Participation

This chapter aims to 1) select each representative example of public institutions participating in the market as categorized in the previous chapter, 2) judge the validity of market participation, and 3) identify alternatives to each case. In order to review the validity of public institutions' participation in the market, each case must under go the following five procedures. The first stage is to classify each example into one of the eight types of public institutions as identified in Chapter II. This first step is vital because a different flowchart of validity assessment can be applied according to the type of market participation.

Second, it should be determined whether the market participation activity generates benefits outweighing the costs. Costs include encroachment on the

[Figure IV-1] **Procedural Flowchart to Assess Validity of Market Participation**



private market, relative inefficiency compared with the private sector, and excessive supply compared with the private sector. In contrast, the benefit varies according to the function of market participation. A direct cost-benefit analysis is impossible. Therefore, there is no choice but to assume that the cost is constant and that if the business yields negligible benefit, the benefit is deemed to be lower than its cost. If suspending the function is likely to cause little issue, the function should be ceased without further discussion. In reality, however, few cases receive such a simple assessment as public institutions participate in the market for their own reasons. For Type 4 businesses with neither public interest nor profitability, however, the decision to continue or suspend the business is mostly determined at the second stage in which the necessity of market participation is assessed.

Third, the assessment should consider whether the function can be replaced without the public institution participating in the market. If the initial objective of the function can be achieved through other policies such as vouchers and the minimum subsidy bidding system, the public institution should cease market participation and transition to a supervisory role. In this case, the cost of market participation can be avoided.

Fourth, market participation by a public institution must be predicated upon its competitive neutrality towards its private counterparts. In many cases, public institutions face advantages over private enterprises in competitive bidding. Competitive neutrality is not required solely for public institutions which are authorized to be able to continue market participation following an assessment. Instead, it isa necessary prerequisite even in cases where alternatives to market participation are in use, such as the aforementioned vouchers or minimum subsidy bidding system. In accordance with the principle of market-based testing, such projects should select a supplier with better service and lower prices from public institutions and private companies in fair competition. Public institutions should cease its function of market participation immediately without undergoing market testing, if competitive neutrality cannot be achieved as long as it remains a public institution. In some cases, it is also possible to privatize the function in question.

Fifth, the case should be analyzed as to whether it is an exception to competitive neutrality. The examination of each case is conducted to identify any particular reason to accept the public institution's advantageous status over its private counterparts. This chapter attempts to present these five questions in relation to each type in detail as follows.

2 Case Studies of Market Participation by Type

A. Korea Land and Housing Corporation's Rental Housing Business (Type 1-1)

1) Business Summary

The government has been engaged in the supply and management of rental housing services, such as permanent rental housing, national rental housing, and public rental housing, since the 1990s when the Korea Land and Housing Corporation (LH) began its permanent rental housing service with the aim of constructing two million residential units. As the rental housing type that stabilized housing for the lowest income bracket, permanent rental housing is mainly aimed at national basic livelihood recipients and national merit recipients, with the government responsible for 85 percent of construction funds, and rental fees set at around 30 percent of the market price. National rental housing also has the aim of securing housing stability by expanding the recipient base to encompass income brackets 1 to 4. The government pays 30 percent of construction costs, loans from the National Housing Fund are responsible for 40 percent, and operators and residents pay the remaining 30 percent, with rental fees adjusted at approximately 70 percent of the market price. Public rental housing, including sales after five-year or ten-year lease, is supplied at around 90 percent of the market price, allowing sales of housing after a certain period of lease. The National Housing Fund also supports the sale of public rental housing by providing loans between 55 million won to 75 million won for each house.

〈Table IV-1〉 **Type of Housing Construction Projects**

Classification		House size	Gov. Support	Target	Rental period
Rental Housing	Permanent	Less than 40 m^2 for exclusive use	Finance, fund	Income bracket 1	Permanent
	National	Less than 85 m^2 for exclusive use	Finance, fund	Income brackets 2–4	30 years
	Public	Less than 85 m^2 for exclusive use	Fund	Income brackets 3–5	5 years, 10 years

Designed to stabilize residence among low-income households, the LH's constructed rental housing project is recognized for its high public interest and low profitability, thereby being categorized in Type 1-1. The LH annually reportsa deficit to the scale of several hundred billion won, which is growing every year and expected to reach one trillion won in 2013. Building one house for national rental housing creates a deficit of 96 million won, 73 million won of which is left as financial debt not attached to any assets. This is because the rental project is structurally deficit-making, since it mainly depends on loans taken by the LH for its construction costs due to the lack of support from the National Housing Fund. Another contributing factor is that its rental fees are below the market price, thereby resulting in huge losses for the rental service.

2) Validity Assessment of Market Participation

The LH's constructed rental housing service is considered to be highly beneficial to the public interest due to its aim of stabilizing residency. Alternatives for the LH's direct participation in the market include the consumer-side policy of vouchers or supplier-side policy of minimum subsidy bidding. Currently, low profitability in the constructed rental housing business causes reluctance among private businesses to participate in the market. With government support or the introduction of the voucher system, however, it is highly likely for a growing number of private companies to enter this market. In contrast, since the private housing market also possesses adequate capacity to supply housing, it is argued that the LH's function of building and supplying public rental housing must undergo assessment of its validity.[5] According to

〈Table IV-2〉 **Economic Analysis of Public Rental Housing Service**

(Unit: thousand won/ housing unit)

	Cost	Benefit	B/C
Permanent Rental	73,463	33,646	0.46
National Rental	59,546	21,943	0.37
Housing Voucher	38,662	38,662	1.00

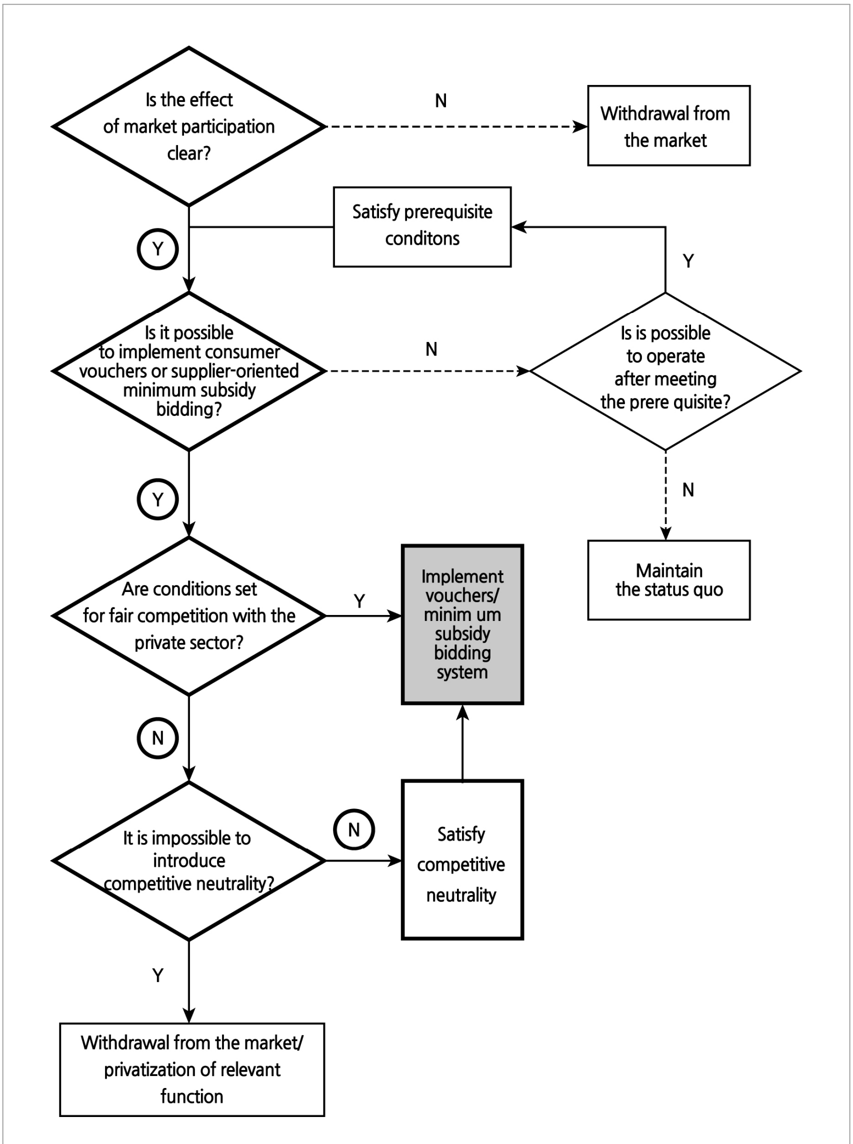
Source: National Assembly Budget Office, *Assessment of the Bogeumjari Housing Service*, 2012.

the analysis of the public rental housing service in the study *Assessment of the Bogeumjari Housing Project* (2012), cost-benefit analyses of permanent rental housing and national rental housing yielded results of 0.46 and 0.37, respectively, which are much lower than that of the housing voucher system in which cash is directly offered.

Therefore, the government should compare the degree of efficiency between the system of having a public institution build and supply housing, as opposed to transferring housing built by private companies into public housing. The latter is well represented in the LH's purchase and lump-sum deposit rental program, in which the corporation buys existing housing in order to provide assistance to certain demographics, such as national basic livelihood act recipients, the lowest income bracket, newly married couples, and university students. It is argued that the LH should consider expanding its consumer-centered housing welfare program, by supplying purchased rental housing and housing vouchers for example, rather than directly building rental housing. As for the housing voucher scheme, it is designed to support the payment of rental fees by low-income families in various ways. Its advantages include expanding housing options for consumers and preventing social problems caused by the dense clustering of low-income households. Above all, the biggest benefit of the housing voucher system is to relieve the LH's burden of construction costs. However, the introduction of the system also requires serious

5) National Assembly Budget Office, Assessment of the Bogeumjari Housing Project, 2012

[Figure Ⅳ-2] Type 1-1: Validity Assessment of Market Participation of the LH's Rental Housing Service



consideration beforehand. First of all, rising rental fees in the private rental housing market immediately equates to growing financial burden on the government. Furthermore, extra cost should be taken into account in efforts to manage the voucher system, such as addressing unlawful acquisition. Premature downsizing of the LH's rental housing service before the private sector expands its construction of rental housing can cause confusion in the housing supply. The service should be gradually down scaled while establishing alternatives, such as housing choice vouchers, the minimum subsidy bidding system or Build-Transfer-Lease. In addition, the LH should be engaged in voucher management. This is because an organization with expertise and concern towards the public interest is required for the management of the voucher system, which includes confirmation of rental contracts, examination of adequacy of rental fees, monitoring residency changes, and checking out housing status.[6)]

The LH should not completely withdraw from the rental housing market, despite the objective of enticing private companies to participate in the rental housing business. For the time being, the LH and its private counterparts should be in competition, which requires compliance with competitive neutrality as previously mentioned in Chapter IV. By going through these procedures, the LH should reduce its role in the constructed rental housing market.

B. Korea Resources Corporation's Resources Development (Type 1-2)

1) Business Summary

Since initiating its support for foreign resources development in 1978, the Korea Resources Corporation (KORES) has dedicated direct investments as part of its effort to assist the mineral resources development in the private sector since the 1990s. Subsequently, as increasing prices of mineral resources highlighted the need for the aggressive development of resources, the government has implemented a range of policies in order to significantly enhance the

6) In the U.S., the housing voucher system is operated by Public Housing Agency, which is a federal government-owned public entity with about 3,300 agencies across the country.

independent supply capabilities towards many energy/industrial materials, by setting the goal of establishing six strategic mineral sources for independent development, expanding the source of legislatively allocated capital by amending the Korea Resources Corporation Act (December 2008), and changing the function of resources development from promotion to investment.

In terms of foreign resources development, the roles and function of KORES are classified into two: direct investment in foreign resources and development assistance for private companies. Direct investment in foreign resources has witnessed its budget increase dramatically since 2007, when soaring global resource prices prompted active discussion over the need for direct development and investment. On the other hand, development assistance for private companies is led by two projects. One is the Foreign Resources Development and Research designed to utilize the technology and manpower resources of KORES to assist the private sector businesses that carry out research on foreign resources development. The other is the Foreign Resources Development Loan, which offers low-interest loan to private companies. Unlike direct investments by KORES, which is rapidly expanding, the scale of assistance for the private sector is declining, which seems to result from the lack of investor confidence and development willpower.

KORES's aggressive promotion of direct development has led to visible results, such as achieving its policy objective of significantly improving independent development rates, while importing development resources has helped stabilize the supply of mineral resources in Korea. However, it is also pointed out that the corporation's expansion of direct investment might undermine the private sector's development capabilities, given the fact

〈Table IV-3〉 **Current Situation of KORES's Foreign Resources Direct Development**

(Unit: No., hundred million won)

Classification	2007	2008	2009	2010	2011	2012
Number of projects	20	26	29	33	36	38
Amount of investment	1,348	2,256	3,576	3,664	7,794	8,368

Source: KORES internal data (October 2013) that KORES has the largest share of mineral resources investments in the market and the corporation's support for its private counterparts is on the decrease. Therefore, there is a need to closely examine KORES's roles and functions, develop more effective development methods to stabilize supply of mineral resources, and institute a division of roles between the public and private sectors.

2) Validity Assessment of Market Participation

As mentioned previously, KORES focused on assisting private companies to expand overseas, but began to concentrate on direct investments following the 2008 revision of its legislation. This research examines KORES's direct investment as a subject of analysis for market participation, firstly to determine whether the function can be categorized as Type 1-2. The corporation pursues public interest through direct investments, since allowing the private sector to be the only market participant in foreign resources development may provide a hindrance to the swift enhancement of independent development. It seems apparent that the corporation's market participation is contributing to the achievement of this goal. Since 2008, independent development rates have drastically fallen for seven mineral resources, including bituminous coal, uranium, iron, copper, zinc, and nickel. Therefore, the recent rise in independent development rates can be interpreted as KORES's contribution to the enhancement of the public interest. In contrast, KORES began to operate at a loss since 2012, despite achieving until 2011. Compared to 2007, KORES statistics in 2012 recorded an increase of 4.4 times in terms of assets, whereas its debt also increased by 5.5 times, resulting in an increase in the debt ratio from 103% to 177%. Considering these factors, this business is considered to fall into Type 1-2, with high public interest and low medium-term profitability.

〈Table IV-4〉 **Independent Development Rates of Six Mineral Resources by Year**

(Unit: %)

	2006	2007	2008	2009	2010	2011	2012
Self-development rates	16.6	18.5	23.1	25.1	27.0	29.0	32.1

Source: KORES internal data (October 2013)

It is true that SOEs are highly effective in rapidly enhancing independent development rates in a short period of time. While the private sector usually evaluates profitability and potential risks before deciding to invest, SOEs are able to be more confident in their decision to invest because the government provides assistance and shares the responsibility for the investment decision. In addition, SOEs often have a high international credit rating and therefore face an advantage when establishing a consortium with private enterprises, compared with private companies of other countries. Private companies generally encounter difficulties when making a continuous investment from a long-term perspective depending on the conditions of the global mineral resources market, mainly because the scale of the Korean private sector engagement in resource development remains limited.[7)]

However, the expansion of KORES's direct investment is not necessarily required in order to boost independent development rates. Of course, the corporation's direct investment is highly likely to improve independent development rates, but this is not the only way to achieve the goal, and the same can be achieved by providing assistance to private enterprises. Compared to cases where private enterprises become involved in overseas resources development, the corporation's involvement can cause negative aspects for three reasons. First is the potential issue of excessive investment. While private enterprises are foremost concerned with profitability, public institutions are less likely to examine the risk of investment. Furthermore, when the government sets a highly demanding goal in terms of independent development rates, this may result in imprudent investments. The 2012 government audit conducted by the National Assembly showed that KORES posted a much higher failure rate (83 percent) compared with its private counterparts in terms of overseas resources development.[8)] However, KORES has the capacity to maintain manpower

7) However, some private enterprises have the possibility of growing into mineral majors, including POSCO, LG International Corp., Samtan, Daewoo International, and SKN.

8) Other problems pointed out in the parliamentary inspection of government offices include KORES's buyout of 100 percent of shares in the Ambatovy nickel project, unviable resource diplomacy in the Mexico's Boleo copper mine development project, and the pursuit of a disadvantageous contract in the Bolivian lithium mine development project.

expanded through greater investment and to boost the scale of its investment for continued organizational growth. This has led the corporation to hold a somewhat overly optimistic outlook on its investments, which was highlighted by the Board of Audit and Inspection in 2013.[9] Second, direct investments by KORES might raise the concern that its sole focus on securing independent development rates may result in negligence towards real domestic demand, since KORES is not a consumer itself. This was also indicated by the Board of Audit and Inspection (2012) and the National Assembly in its parliament inspection of the administration (2012). Third, KORES's direct participation in the market reduces the private sector's opportunity to boost their capabilities in the long run. However, the corporation's overseas resources development does not restrict the participation of private companies. At present, KORES seems to play a role in encouraging private enterprises to participate in overseas resources development through its capacity to assemble a consortium.

In conclusion, KORES should down scale its direct investment. For the present, the corporation must become part of a consortium with private companies, but it should eventually begin to reduce its direct investment. Naturally, KORES's dramatic boost in investment during the 2008-2012 economic crisis was a beneficial policy to an extent, because it maintained the

〈Table IV-5〉 **Current Status of Investment in Foreign Resources**

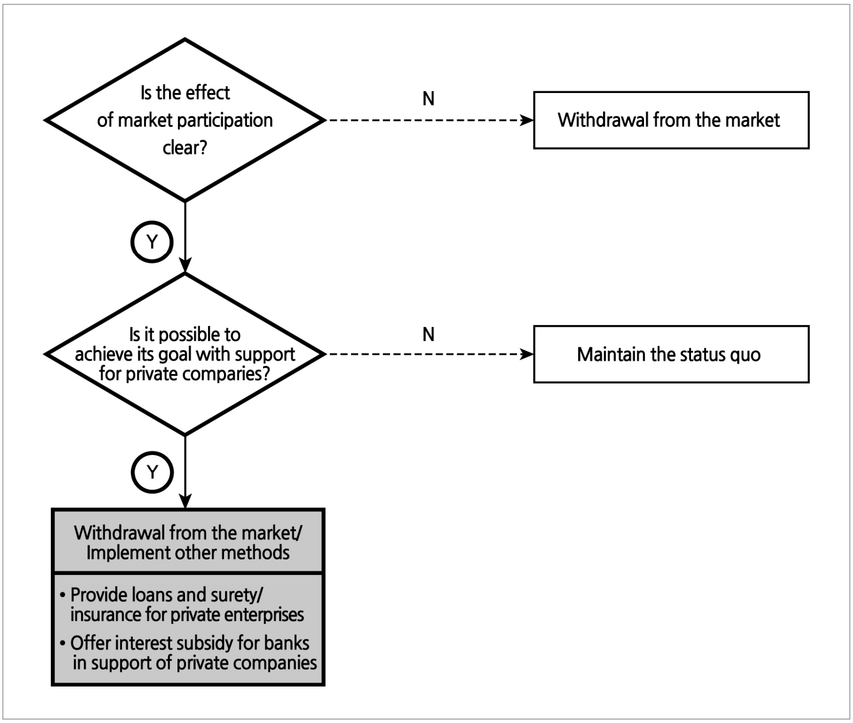
(Unit: million dollars, No.)

		'06	'07	'08	'09	'10	'11	'12	Total
Public	Amount of investment	45	145	212	268	315	712	749	2,519
	Number of new projects	4	4	7	3	5	5	1	
Private	Amount of investment	141	513	1,616	379	1,391	453	1,046	7,525
	Number of new projects	11	26	42	40	32	24	31	

Source: KORES internal data (October 2013)

9) According tothe Board of Audit and Inspection, KORES was found to have established its medium- and long-term financial management plan based on its outlooks: dividend yield in foreign stocks was expected to be high, procurement interest rate to be low, and resource prices to remain high.

[Figure IV-3] **Type 1-2: Validity Assessment of Market Participation of KORES's Foreign Resources Development**



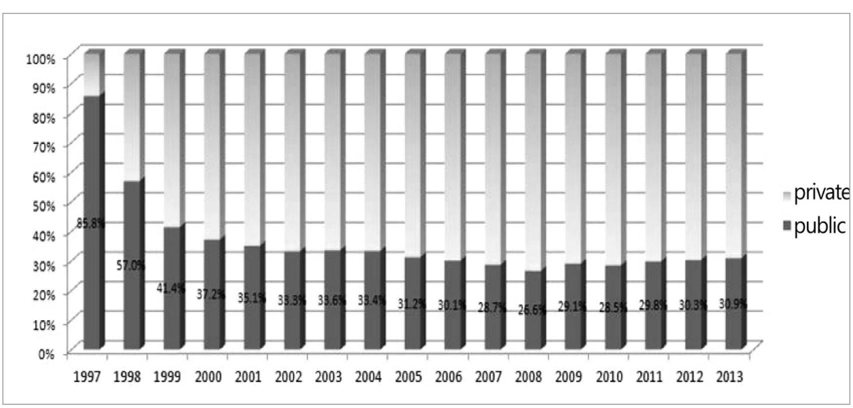
overall scale of development investment in foreign resources and compensated for a reduction in private investment. With the crisis mitigated, however, the corporation should reduce its direct investment and transition its strategy towards encouraging private sector leadership. In the medium-to-long term, KORES should revert to its original role prior to 2008 and reinitiate support for private investment in overseas resources development. Among the six strategic resources in particular, KORES should withdraw its investment from markets with aggressive private sector investments and those that exceed the target rate of independent development. Even when continuing its direct investment, KORES should rapidly shift to a new strategy of selecting specific mineral resources in need of direct investment and supporting the private sector in others, instead of directly investing in all mineral resources.

C. Korea Transportation Safety Corporation Authority's Vehicle Inspection and Maintenance (Type 2-1)

1) Business Summary

General vehicle inspections aim to ensure the observance of driving safety and emissions standards by vehicle owners residing in air pollution control areas or cities with a population of over 500,000. General Inspection is conducted in a biennial cycle for vehicles with registrations more than six years old at least. Periodic inspections are conducted in a biennial cycle to check the safety of vehicles registered nationwide, with registrations more than four years old at least. The Korea Transportation Safety Corporation Authority (TS) had been exclusively responsible for vehicle inspections since July 1981, but a surge in the number of registered vehicles resulted in a dual-track system combining the efforts of the TS and authorized maintenance private enterprises, which aims

[Figure Ⅳ-4] **Ratio of TS Vehicle Inspections to Private Sector Inspections (Periodic and General Inspections Only)**



Source: TS

to provide more convenient service to vehicle owners. As of September 2013, approximately 30 percent of all periodic and general inspections have been carried out by the TS, compared with around 70 percent by its private partners. As for inspection fees, each private enterprise sets it in accordance with the related law.

At the initial commencement of the service in 1981, the TS was placed exclusively in charge of vehicle inspections in order to ensure the impartiality of the inspection service, but since the market began to liberalize in 1997, its goal of market participation shifted to place greater emphasis on market control. In a competition structure where private enterprises are dominant over approximately 70 percent of the market, the TS's major goal of market participation is to prevent private sector services from sacrificing quality of service for affordable prices, while improving upon the overall quality of service and the information asymmetry in the market. It would appear that the TS's participation in the vehicle inspection service essentially constitutes a form of market control by addressing information asymmetry, as well as enhancing the welfare of the disadvantaged by offering discounted inspection fees. Moreover, the vehicle inspection business was found to be highly profitable as of 2012, sales from vehicle inspections generated 98.6 billion won, accounting for 55.5 percent of the TS's total sales. In addition, its earnings rate stood at 7.2 percent as of 2012, compared with 3.4 percent of the TS's overall rate of return.

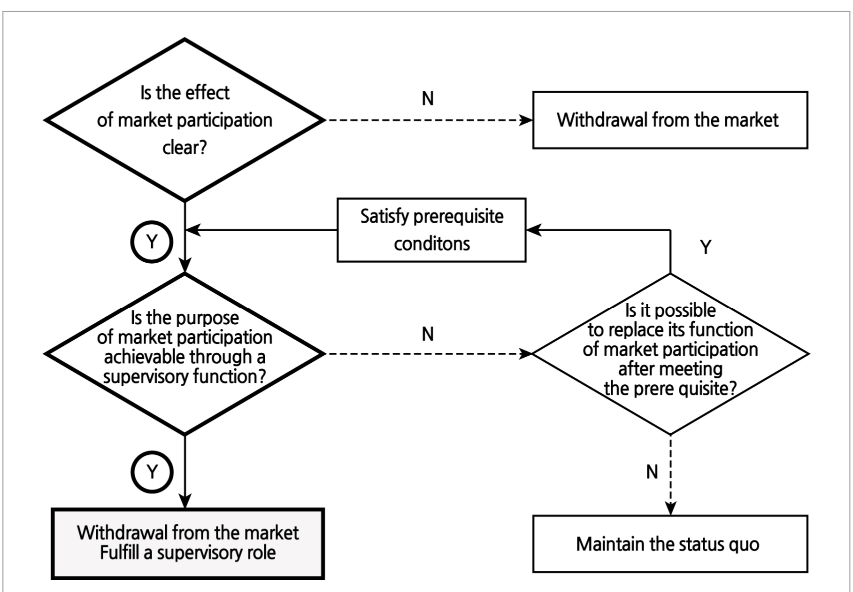
As stated above, when analyzed in terms of public interest, profitability, and market participation objective, the TS's vehicle inspection falls into Type 2 with high public interest and profitability, and more specifically into Type 2-1 as the corporation aims to mitigate information asymmetry.

2) Validity Assessment of Market Participation

The TS's participation in the vehicle inspection business, as discussed above, appears to benefit the public interest through its positive effect on information asymmetry. However, the function of market control can be also achieved through a supervisory role, rather than directly participating in the market. Currently, the supervisory responsibility towards vehicle inspections is with local governments, but it is beyond their capability to supervise all private inspection centers since there are 1,611 authorized maintenance private enterprises across the country. The TS has carried out its own supervisory functions, such as establishing and operating a monitoring system for private vehicle inspections, and participating in joint law enforcement with the police and relevant municipal and provincial agencies in order to offer guidance against lax inspections. Under the current system, however, it is difficult for the TS to strengthen its supervisory role since the function itself is under the purview of local governments. The TS has the capacity to retract the supervisory function from local governments, which is worth consideration as an alternative to the TS's direct participation in the market. As for inspection fee discounts for the disadvantaged, the same function can be easily achieved with the introduction of vouchers, without TS market participation.

Therefore, instead of maintaining the status quo by continuing to directly conduct vehicle inspections as an instrument for market control, the TS can

[Figure IV-5] **Type 2-1: Validity Assessment of the TS's Market Participation in Vehicle Inspection**



achieve the same goal by strengthening its supervisory function to ensure that the private sector is able to implement a high-quality inspection regime.

D. Korea National Oil Corporation's Economical Gas Station Business (Type 2-2)

1) Business Summary

In 2012, the Korea National Oil Corporation (KNOC) introduced the economical gas station project in order to address the private oligopoly in the domestic oil distribution by promoting competition and reducing prices through direct market participation. Accordingly, the KNOC has continuously made joint purchases of oil from oil refineries or secured low-price oil from non-production oil companies in order to secure a supply for economical gas stations, thereby revitalizing competition and securing price stability. The project was designed in response to the four main oil companies' vertical integration of the market distribution structure, which undermined competition and price stability. The government reacted with the policy of systematically expanding the supplier base beyond the four major refineries, which was initiated in November 2011 with the announcement of 'The Economical Gas Station Promotion Plan' by the Ministry of Knowledge Economy. In order to expand the economical gas stations project, the government has offered a range of strategic incentives, such as offering tax reductions[10] to operators of businesses that transition into economical gas stations, offering support for facility improvement costs and registration fees for quality assurance programs, and expanding a consortium of businesses for partnership cards. As of July 11, 2013, 940 economical gas stations in total were in operation, accounting for 7.4 percent of all gas stations across the country (12,720), while its supply volume[11] between January and June in 2013 posted a total of 340 million liters (1.8 percent of total national

10) Tax reduction in income tax/corporate tax and special tax for SMEs has been expanded from the current 10 percent to 20 percent (for two years), along with a 50 percent reduction in property tax (for two years).

11) A total sales of economical gas stations posted in 2012 around 8.0 percent of the nation' s total sales of gasoline and diesel (289,109,800,000 liters).

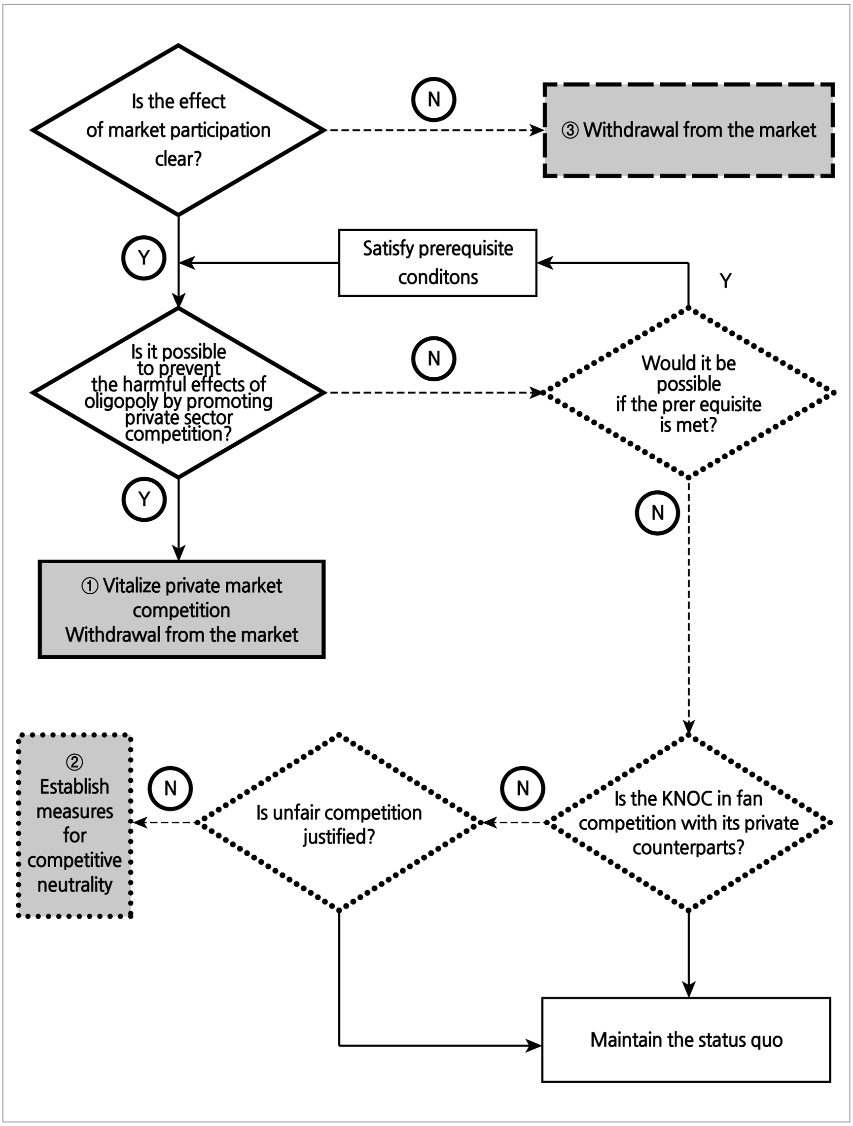
consumption). The project aims to reorganize 10 percent of all gas service stations (around 1,300) as economical gas stations, especially those in large urban centers with easy access to consumers such as Seoul. Also, there are plans to correct unfair trading practices in the distribution market, and diversify supply sources in order to reduce dependency on the major oil refineries by implementing policies such as securing low-price supply from non-refineries (Samsung Total Corp., overseas imports, etc.).

The economical gas station project contributes to the public interest in terms of oil price reduction and competition vitalization in the oil distribution market. Through this project, the KNOC has directly played a role in boosting public interest by counteracting the oligopoly of the four oil refineries by accounting for an approximately eight percent share of the oil distribution market and reducing the monopolistic influence of the oil refineries in the oil retail sector by shifting to the economical type oil stations in partnership with the existing oil refineries. As for the price reduction effect, although gaps existed between fuel prices at economical gas stations and the average oil price at gas stations across the country, it was difficult to determine whether the introduction of the project was the main driving force in achieving price reduction and cost efficiency. In terms of profitability, the project merely covered its own expenses or generated minor profits since it was designed to enhance public interest rather than maximize profits. In conclusion, the KNOC's economical gas service station project is categorized in Type 2-2 due to its high contributions to the public interest, potential for profitability, and the market participation purpose of improving upon theoligopoly in the existing oil distribution market.

2) Validity Assessment of Market Participation

In order to assess the validity of the KNOC's economical gas filling stations project, the effect of its market participation should be first examined. As mentioned previously, however, it is difficult to determine the exact effects of the KNOC's participation in the oil distribution market, because it has been in operation for a short length of time and there is little analysis available on its effect. Nonetheless, if the effect of the project can be construed as resolving supply problems in the oil distribution structure and oligopoly at a retail level,

[Figure Ⅳ-6] Type 2-2: Validity Assessment of the KNOC's Economical Gas Station Business



the next step will be to determine if it is possible to prevent the harmful consequences of oligopoly by fostering competition among private enterprises, rather than directly taking part in the market. In principle, when competition is vitalized, issues such as unfair competition caused by oligopoly will be mitigated. In other words, unfair competition practices can be alleviated if the KNOC ceases to participate directly in the market and instead assumes a supervisory role towards the transparency of the market and the potential fallout of unfair business practices, which would stimulate competition in the private sector. Considering recent attempts to reduce oil prices, such as the establishment of the National Oil Corporation and the promotion of self-service gas stations, a viable alternative may be the option of transitioning the KNOC's role from direct market participation towards promoting a self-governing system of market competition and supervising unfair business practices (Alternative 1).

However, strengthening its supervisory function alone may not be enough to revitalize market competition, due to the barriers to entry that new oil production companies can face under the existing market structure, alongside the typical problems caused by oversupply. In addition, although the government had attempted to correct unfair trading by announcing numerous proposals to reform the oil distribution structure, the problem of oligopolistic market occupation by the four major oil companies has yet to be resolved, which justifies the continued operation of the KNOC's economical gas stations project. However, the principles of competitive neutrality should be observed as a condition for continuing the project (Alternative 2). Currently, the project is supposed to maintain a low-cost structure through government support for taxation and facility conversion costs and its use of the KNOC's existing infrastructure. These benefits may pose an obstacle to fair competition by allowing the KNOC an advantage over its private competitors, which constitutes a distortion of the market structure. Therefore, maintaining the project and invigorating competition among private sector businesses require measures to ensure competitive neutrality. However, if the cost efficiency of the project is not high enough—as recently pointed out in the media and results of parliamentary inspection of the administration—another reasonable alternative would be for the KNOC to withdraw from direct market participation (Alternative 3).

E. Korea Tourism Organization's Duty-free Shop Operation (Type 3-1)

1) Business Summary

The Korea Tourism Organization (KTO) has operated duty-free shops since 1962 to sell duty-free goods to Korean nationals and foreign visitors departing from airports. In 1962, the KTO assumed control over stores selling certain items of foreign goods from the Ministry of Land, Infrastructure and Transport (previously the Ministry of Construction and Transport), and during the period between 1974 and 1979, it jointly operated duty-free shops with private enterprises. During the period of 1980-1999, the government's decision to appropriate the operating profits from duty-free stores to be used for public interest purposes led city-based duty-free stores to be run by private enterprises, while the KTO maintained the exclusive right to run duty-free shops in domestic and international airports. As a part of plans to innovate public institution management in 1998, competitive bidding was introduced for selecting business operators of duty-free shops in the Incheon International Airport, but in 1999, the Office for Government Policy Coordination partially changed competition rules upon the suggestion of Minister of Culture and Sports at the time, to allow the Incheon International Airport Corp. and the KTO to negotiate a contract[12] regarding a certain area of the airport. In 2008, the KTO operated the largest number of stores (ten duty-free shops) across the country (three airports in Incheon, Cheongju, and Muan, six sea ports in Busan, Pyeongtaek, Sokcho, and Gunsan as well as the Incheon Port International Passenger Terminals 1 and 2, and Geumgangsan). Under the public institution advancement plans[13] of 2008, however, the KTO was required to carry out a phased withdrawal from the business, and it is currently running five shops (Incheon International Airport, Incheon Port 1 and 2, Busan Port, Pyeongtaek /Gunsan Port) in 2013. The remaining five stores are also subject to phased withdrawal in consideration of contract periods, and the Pyeongtaek Port store

12) According to meeting results of the Office of Government Policy Coordination, the KTO was allowed to make a private contract regarding a partial number of duty-free shops assigned to the corporation, with the same rental conditions with other business operators selected through competitive bidding.

13) Public Institutions Policy Bureau (Ministry of Strategy and Finance), October 10, 2008.

was auctioned off to a private enterprise in January 2014. As for the size of the workforce, the KTO made restructuring efforts under the public institution reform plans, by reducing its employees from 192 in 2008 (26.3 percent of the KTO's total workforce) to 87 in 2010 (14.3 percent).

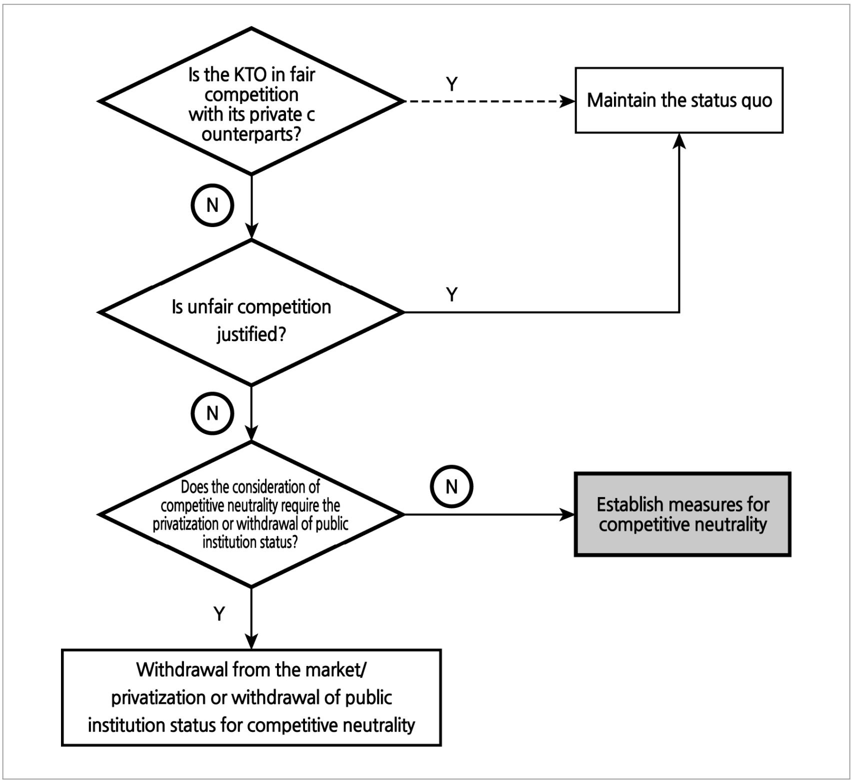
To date, the KTO has secured financial resources for the promotion of tourism in Korea through government subsidies and profits from the duty-free business. Its profits from operating duty-free shops accounted for approximately 16 percent of the KTO's total budget, and its total profits over a period of eight years (2005-2012) posted 161,796 million won, with an annual average of around 20 billion won. Both the National Assembly and the Board of Audit and Inspection have recommended that the KTO minimize its focus on profit generation and place greater effort to its original purpose of tourism promotion. After the KTO downsized the duty-free shop business and transferred parts of the operational authority to the private sector, revenues from the business decreased from 41.4 billion won in 2007 to 13.8 billion won in 2011, and its market share plunged from 13 percent in 2007 to 4.8 percent in 2009. Meanwhile, government subsidies increased from 97.2 billion won in 2007 (21 percent ratio to sales) to 130.3 billion won in 2011 (37 percent ratio to sales).

The KTO's duty-free shop business was designed to secure finance for public projects, which remains its foremost operational goal. The significant earnings generated from the business allow the conclusion that the KTO's duty-free store enterprise is highly profitable. As for the public interest, the corporation has played a significant role in selling and promoting domestic goods and products produced by SMEs in duty-free shops, but this is difficult to construe as a major effect of the business and instead appears to be a side-effect. Based on the analysis, the KTO's duty-free shop business appears to be high in profitability and low in public interest, thereby falling into Type 3-1, in which business profit is appropriated to finance other public projects.

2) Validity Assessment of Market Participation

Compliance with competitive neutrality is the first standard to assess the validity of market participation of Type 3-1,which is characterized by high profitability and low public interest. As the earlier analysis notes, the KTO fails

[Figure IV-7] Validity Assessment of Market Participation of the KTO's Duty-free Shop Business



to adhere to principles of competitive neutrality. Specifically, the KTO exploited its advantageous position as a public institution to secure a negotiated contract for its five duty-free shops,[14] while its management strategy is a representative example of cross-subsidization—utilizing the profitable project of duty-free stores to finance other public projects. Therefore, it has been suggested that

14) Public institutions are prohibited from bidding for the duty-free shops in the Pyeongtaek and Busan Ports, whose contracts are due at the end of 2013.

the validity assessment of the KTO's duty-free enterprise must first institute competitive neutrality measures.

In regard to cases in which public institutions take part in the market to capitalize on a profitable project to secure finance for other public services, it is somewhat inappropriate for the objective of securing finances for public projects to be achieved through the market participation of public institutions. The KTO's duty-free shop business had already been announced to undergo phased withdrawal by the end of 2012, under plans for public institutions reform. However, the organization has made a short-term contract extension on the grounds that it is difficult to secure alternative resources and there is significant public interest in the sale and promotion of domestic products of SMEs. On the other hand, the government has also been aggressive in protecting products manufactured by SMEs in duty-free shops and assisting SMEs to advance into duty-free shops. One such example includes the October 2013 announcement by the Korea Customs Service to reserve over 70 percent of shelf space in domestic sections of duty-free shops to sell products produced by SMEs, along with other schemes to prevent the dominance of big businesses and to enable SMEs to sell their products in duty-free shops. If the government maintains its commitment to such policies, the KTO would have little cause to remain responsible for duty-free shops for the purpose of protecting small and medium-sized businesses. Therefore, if the KTO becomes able to secure financial resources for developing tourism, the organization will not need to participate in the market through duty-free shops. However, in the absence of an alternate source of finances, the KTO will continue to operate duty-free stores, which in turn requires measures to ensure fair competition with the private sector.

F. Korean Standards Association's Education Business (Type 3-2)

1) Business Summary

The Korean Standards Association (KSA) was established under Article 32 of the Industry Development Law for the purpose of strengthening research and promotion towards industrial standards and offering the certification service for quality management as the national provider of comprehensive knowledge-based services (standardization and standards, quality, certification, and training and education). In particular, training and education are core services of the KSA, which aims to foster outstanding industrial manpower.

Its education business is largely divided into four branches: 1) public, 2) corporate in-house, 3) government-supported, and 4) distance education. First, public education is sub-divided into 1) regular education in which the KSA is in competition with the private sector to cover a range of subjects such as quality management, HR, production innovation, management innovation, ISO certification, and corporate social responsibility, and 2) KS education as a field separate from the private sector under the Industrial Standardization Act. Private businesses can provide KS education upon meeting the standards stipulated in the related law, but currently there are only two education operators including the KSA. Second, corporate in-house learning provides performance-centric education which is customized to the needs of each enterprise with regards to the time and venue. Third, government-supported education is offered over periods of 4-12 weeks and aims to improve core competency for SMEs (receiving assistance after undergoing screening by the Human Resources Development Service of Korea) and education programs selected through public bids. Fourth, distance education is divided into e-learning and distance learning education (using learning materials such as textbooks) for self-motivated learning acrossa wide range of subjects, such as product quality, environmental concerns, production, services, purchasing, logistics, general management, and foreign languages. All education programs apart from KS education operate in competition with the private sector. The KSA's sales from its education business have gradually increased between 2008 and 2012. From total sales of 97.9 billion won in 2012, training and education accounted for 68.5 percent (67 billion won), with corporate in-house learning responsible for the largest share in revenues, followed by public education, distance education, and government-supported education. The profit from KS education was used for KS certification, which records an annual deficit of 2-3 billion won on average, while revenues from other education programs were partially used for R&D on standards. The public interest in the KSA'education service is difficult to recognize since its market is shared by many private companies, while most of the revenue is used by the company as operational expenses. Although the profit generated from KS education is mostly used for the KS certification business, which regularly incurs 2-3 billion won of debt each year, it is difficult to surmise that revenues from other education programs are spent to cross-subsidize other public services. Based on the analysis, the KSA is considered to fall into Type 3-2, although it shares characteristics of Type 3-1.

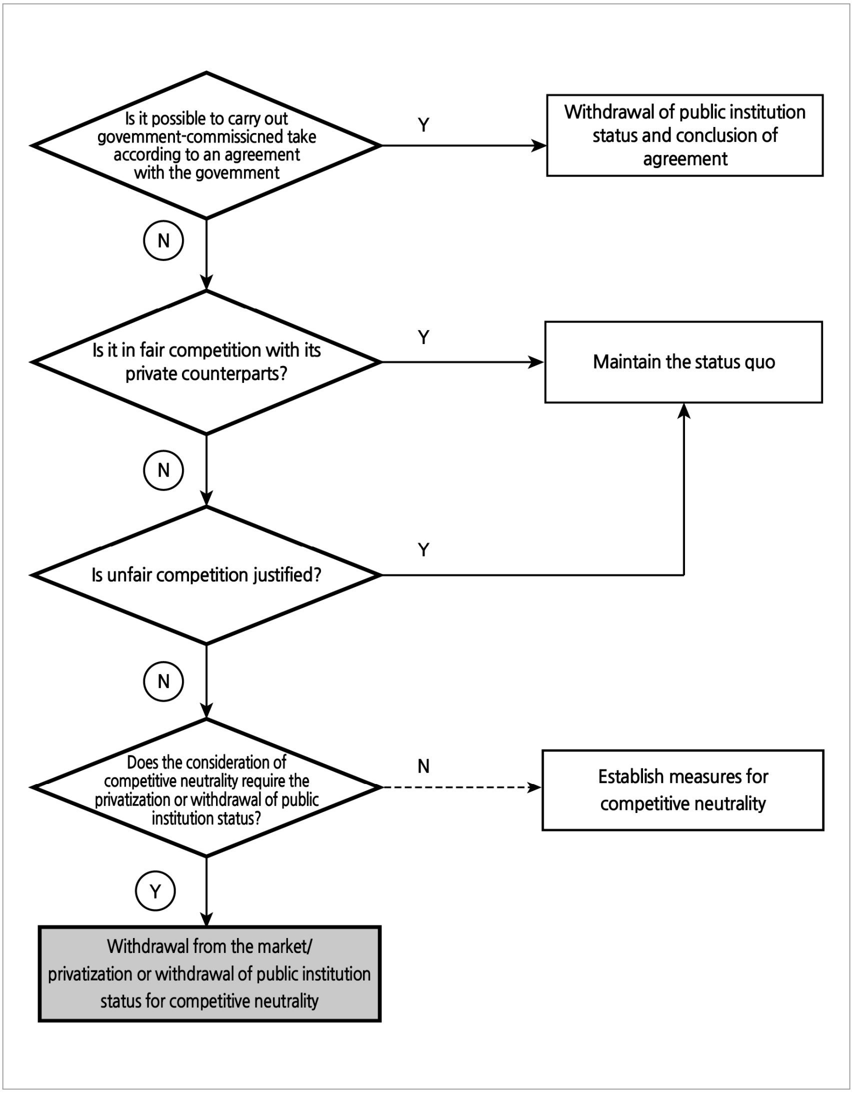
2) Validity Assessment of Market Participation

In regard to the education service, there are overlapping functions between the KSA and private companies engaged in human resources development. The KSA is currently in free competition at similar price levels with multiple private rivals, including the Korea Productivity Center and the Korea Management Association, which are no longer public institutions. As for KS certification, standards R&D, and KS public education, the KSA is offered fees (or subsidies) by the government. In addition, the KSA is at a disadvantage when competing with private companies because the corporation is unable to promptly carry out an organizational reshuffle or establish a new department, and faces government restrictions on workforce capacity and entry into new businesses.

However, the KSA is automatically given a degree of trust and awareness as a public institution and faces advantages in attracting corporate customers because it holds member companies as a part of the association and provides certification services for KS and international certifications. Although KS education is not a requirement, companies generally tend to acquire KS certification due to the additional points entailed in bidding for a government project, while the association is commissioned by the government to provide KS certifications.

Due to its KS certification authority, the KSA holds a favorable position in KS education and other education programs. As mentioned in detail throughout Chapter IV, competitive neutrality is not observed in this case. The association will follow one of the following two paths in the future. First, it can maintain its position as a public institution. In that case, however, the KSA should separate and privatize the education service with the exception of KS education for the sake of competitive neutrality. With support from the government, it can remain

[Figure IV-8] Type 3-2: Validity Assessment of Market Participation of the KSA's Education Business



a public institution responsible for public services commissioned by the government, including standardization and certification. Second, the association's status as a public institution can be withdrawn. This alternative is based on the idea that its services, such as standardization and certification, do not need to be carried out by a public institution. In this case, the government can commission the relevant services through bids involving private enterprises, including the KSA following the cancellation of its public institution status.

Regardless of the chosen option, the KSA must consider that the KS certification service may be introduced to competition in the future. Maintaining the association as a public institution while introducing competition would be problematic in terms of competitive neutrality. If the KSA remains a public institution and competes against private enterprises, this will cause unfair competition in the certification market. If the KSA continues providing the education service as a public institution, this will lead to unfair competition both in the certification and education markets. Based on this analys is, it is considered to be reasonable for the KSA to be divested of its position as a public institution.

G. Korea Agro-Fisheries and Food Trade Corporation' aT Center Operation (Type 4-1)

1) Business Summary

The operation of the aT center is a business under the purview of the Korea Agro-Fisheries and Food Trade Corporation (aT), which was designed in 1995 and opened in November 2002 to promote agro-fishery products. The aim of the aT center is to build the foundation to increase agricultural exports by unifying the facilities and capabilities to support the agro-fisheries and food trade, and to enhance the competitiveness of the industry by holding a range of related events. The aT center holds exhibitions, fairs, events, meetings, and seminars related to agricultural and fishery products, while also serving as a business center for foreign trade companies.[15] Its business expenses recorded 77.8 billion won in total, composed of 26.7 billion won in government subsidy, 28.6 billion won in loans from the agro-fisheries price stabilization fund, and

22.5 billion won from its own fund.

The aT center offers a wide range of benefits for agricultural exhibitions, including preferential allocation and up to 50 percent discounts for venue rental fees.[16] As of 2012, usage rates of the aT center's exhibition halls and

〈Table Ⅳ-6〉 **Major Facilities of the aT Center**

Classification	Area (m^2)	Purpose
Total	59,104	
Exhibition hall	14,516	ㅇ Holding exhibitions, fairs and events for agricultural and fisheries products
Conference hall	2,508	ㅇ Holding conferences, seminars, and meetings – Large conference room (1), Medium conference rooms (3), Small conference rooms (3), Business room (1)
Export Publicity Pavilion	11,274	ㅇ Offered for rental to agricultural and fishery trade related groups and export businesses
aT		ㅇ aT Headquarters
Convenience facilities	3,385	ㅇ Bank, cafeteria, stationery, convenience store, clinics
Subsidiary facilities	17,597	ㅇ Parking lot, mechanical room, control room, storage room, etc.
Common-use areas	9,824	

Source: aT center

15) The aT center is a building with 15 above-ground floors and 3 underground floors, measuring at 18,038m^2 (5,456 *pyeong*) in site area and 59,104 m^2 (17,879 *pyeong*) in total ground area, which houses exhibition halls, a total of eight conference rooms in varying sizes including a business room, and the Export Publicity Pavilion, with outsourced management responsible for the facilities and the parking lot.

16) Its benefits include: 1) up to 50 percent discount in venue rental fee (discount rates for agricultural exhibitions per year: 10 percent (2002)→5 percent (2005)→0-50 percent (2011)); 2) incentive system comprised of additional discount policies (additional 5 percent discount for reservations at least a year in advance, additional 3 percent discount for reservations at least six months in advance); 3) free access to the outdoor square to be used for events, such as regular direct trading markets and promotions or sale of agricultural products by local governments; and 4) support for joint events in collaboration with private sponsors.

conference rooms were 76.7 percent and 69.2 percent, respectively, and rental rate of Export Publicity Pavilion was at 100 percent. Currently, agricultural events account for 50-60 percent of all events and conventions held at the aT center each year, with the annual sum of rental fee discounts estimated at 400-500 million won. Its yearly sales post between 7.4-7.9 billion won, while its yearly net revenue stands at around 1-2 billion won. The aT center's cumulative return has yet to surpass its total operating cost, and is still repaying the principal cost.

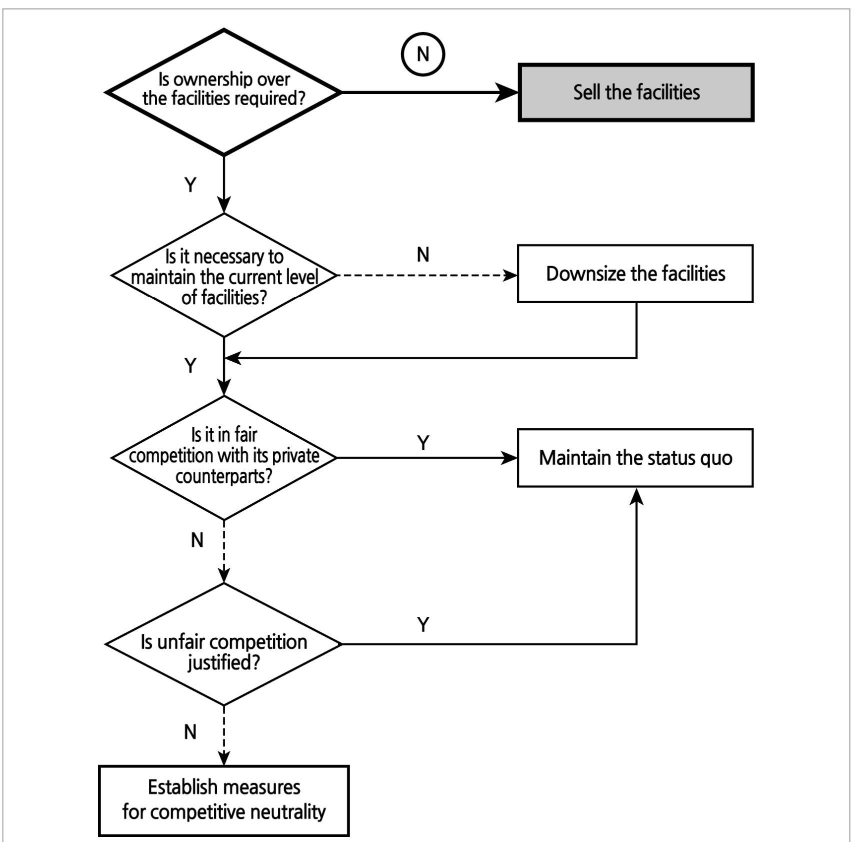
It is difficult to recognize the public interest of operating the aT center, as it is a kind of convention enterprise. Moreover, despite being profitable overall, the aT center is a loss-making venture in real terms if the initial construction costs are taken into account. Against this background, the aT center business is categorized into Type 4-1 in which idle facilities are used without much public interest and profitability. However, the business serves a degree of public interest in its support towards agricultural exhibitions and events, which account for a yearly 50-60 percent of all demand. This aspect of aiding industrial policy can be seen as sharing characteristics of Type 1-2 businesses. On the other hand, it is difficult to substantiate that the rental service for agricultural and fishery convention events is facing under supply, since a number of large agricultural events are held in exhibition halls other than the aT center. Furthermore, other event halls face higher demand because events dealing with agricultural and fishery products are held during a specific seasonal phase due to the nature of their products. Based on the analysis, the aT center is classified into Type 4-1.

2) Validity Assessment of Market Participation

In the private sector, small private convention centers operate in the vicinity of the aT center, along with large exhibition halls including the COEX in Samsung-dong, Seoul and SETEC in Hangnyeoul Station, Seoul. In the past, the COEX was commissioned to manage the operation of the aT center in 2002. Despite the seeming lack of substantial differences between the aT center and its competitors, only the aT center offers specific benefits for agricultural exhibitions and events, including preferential allocation and rental fee discounts. However, a number of similar convention centers are operated by private enterprises, and despite the aT center's discounts for agricultural and fishery events, its service is not significantly distinguished.

It is reasonable for the aT center to be sold. Since the aT center itself is due to relocate away from Seoul, the disposal of the aT center is particularly logical. The revenue from the sale could be allocated to offering assistance for agricultural exhibitions and events. This is in line with the alternative direction for Type 1-2 businesses of choosing support for the private sector over direct

[Figure IV-9] **Type 4-1: Validity Assessment of Market Participation of the aT's Operation of the aT center**



production, because the corporation can offer support to private exhibition halls upon selling off the center, instead of directly running the center. This conclusion remains the same even if the aT center is classified as a Type 1-2 business.

The center has posted 400-500 million won in an annual discount amount for agricultural exhibitions, but this amount can be compensated for with the income from the sale.

The disposal of the aT center may influence the companies leasing space in the center. Although the rental fees imposed on these businesses are somewhat lower than average, this is not a large enough contribution to the public interest in itself. This is because there is little logical credibility in allowingonly agricultural and fishery business operators to receive preferential benefit to the exclusion of numerous other small and medium-sized businesses. However, there may be the side effect of agglomeration, whereby a cluster of similar businesses might engage in behavior such as information exchange, though there is no clear evidence. At the very least, this study recognizes the need for further study on the aforementioned agglomeration effect and the subsequent discussion on the alternative option to allow the continuation of this agglomeration effect following the sale of the aT center.

H. Korea Coal Corporation’s Production and Sale of Anthracite (Type 4-2)

1) Business Summary

The Korea Coal Corporation (KOCOAL) was established in November 1950 for the purpose of securing a stable supply of coal by developing coal mines and managing coal production, process, sale, and accompanied businesses. KOCOAL’s major services include coal mine development, coal production management, control of supply and demand, research & development and transfer of technology of coal mines and coal processing, purchase, sale, and foreign trade of coal and coal-processed products, and coal reservation, all of which are commissioned by the government.

Of the aforementioned major services, the production and sale of coal accounts for the largest share of its establishment purposes. KOCOAL is responsible for 53 percent of Korea’s anthracite production, with 1,615 (94.7

〈Table IV-7〉 **Domestic Anthracite Production by Year**

(Unit: thousand tons, %)

Classification	'07	'08	'09	'10	'11	'12
National	2,886	2,773	2,519	2,084	2,084	2,094
KOCOAL	1,382	1,347	1,353	1,133	1,076	1,100
Market share	48	49	54	54	52	53
Private	1504	1,425	1,166	951	1,008	994
Market share	52.1	51.4	46.3	45.6	48.4	47.5

Source: KOCOAL internal data

percent) employees out of 1,706 in total committed to coal production at mining stations. As most private coal mines were abandoned and the private production of coal consequently decreased, KOCOAL's production share of anthracite has continued to be on the rise.

In terms of its finance, KOCOAL has an extremely poor financial structure, with absolute impaired capital at 649.8 billion won in total asset, 1,446.7 billion won in debt, which resulted in a negative value of 796.9 billion won in capital assets as of late 2012. Indeed, its financial structure has continued to deteriorate, mainly driven by the decline of the coal industry. Concerned with a reduction in coal demand, the government has consistently downsized the industry since 1989 in line with its scheme to reform the coal industry, and as a result the number of KOCOAL's coal mines plunged from nine in 1988 to three in 2012, its yearly production from 5,222 thousand tons to 1,100 thousand tons, workforce from 13,060 to 1,706 during the same period. This reduction in the production scale has led to a reduction in sales.

KOCOAL's coal-mining business cannot be considered to serve the public interest. First of all, it does not fall into Type 1 because coal is not in undersupply. It is not classified into Type 2 either since there is competition in the coal mining industry. Although there remain only two private coal mines at present, KOCOAL's privatization would have led more private enterprises to have entered in effective competition. In addition, the competition between the coal industry itself and other energy sources would suggest that the coal industry would face sufficient competitive pressure without KOCOAL. The task of regulating supply and demand is one that can be fulfilled by the private sector. Therefore, the business types left open to KOCOAL are Types 3 and 4. Since its sizeable deficits would indicate no profitability, KOCOAL's coal mining business must therefore be classified into Type 4. The corporation can belong to either Type 4-1 or Type 4-2 depending on its focus on facility or manpower, and this research categorizes this model into Type 4-2 considering its workforce of over 1,700 employees.

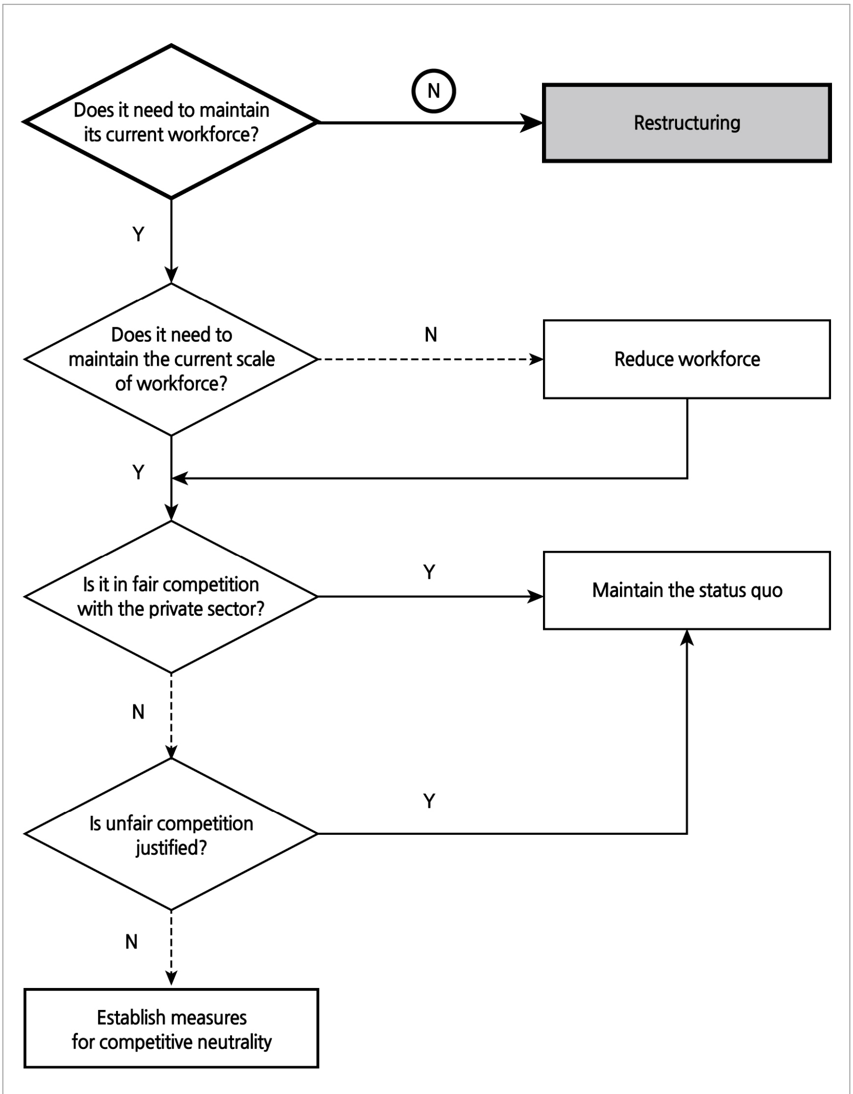
2) Validity Assessment of Market Participation

In the domestic coal mining industry, private enterprises are also engaged in the production and sale of coal, with the private sector market share hovering around 50 percent. With the overall decline of the coal mining industry, however, KOCOAL's market share in domestic anthracite supply is expected to rise, thereby strengthening its role of regulating the demand and supply of domestic anthracite.

However, there is some skepticism over KOCOAL's preservation of the status quo by producing and selling anthracite,[17] on the grounds that the coal mining industry is already in decline along with the demand for coal products. This trend is coupled with the continued deterioration of KOCOAL's financial conditions. According to the government's reform plans, the corporation's reduction of coal production while maintaining facility scale has increased fixed costs in relative terms. Its workforce is also a contributing factor. With its aging manpower (20.7 years of service in average), the corporation has seen a huge yearly deficit due to severance pays following restructuring. Also, KOCOAL has received criticism over concerns of reckless management raised by a wage increase surpassing the level suggested by government guidelines. A 2010 NABO report pointed out that the corporation placed an excessive burden on its retirees

17) See related articles in NABO (2010), *The Financial News* (July 12, 2013), *Money Today* (July 26, 2013), and *The Joongang Ilbo* (May 29, 2013).

[Figure IV-10] **Type 4-1: Validity Assessment of Market Participation of KOCOAL's Anthracite Production**



and should strive to improve productivity as its production cost was higher than its private competitors. KOCOAL posted 1,370 billion won in loans last year, and its yearly interest obligations alone stood at 50 billion won. Moreover, the corporation has ranked among the lowest every year in management assessment. All of these issues have contributed to a growing awareness that the corporation must initiate a phased, continuous restructuring of its business.

In principle, KOCOAL should be liquidated or privatized. The corporation may not be dissolved in a single attempt, considering the potential burden on local economies. Instead, it should reduce production and commence a phased liquidation process. Despite consistently decreasing coal production, it is required to formulate plans for a more drastic reduction of production in the future. Continued operating deficits and erosion of capital reserves require a decisive response. Following privatization, KOCOAL will be unable to maintain its high-cost structure and must therefore restructure its wage and employment system. KOCOAL must make its choice between the two options.

V

Conclusion and Policy Implications

This study examined the market participation activities of several public institutions with regards to grounds for market participation, current status and typology of market participation, compliance with competitive neutrality, and validity of market participation. Based on the findings, it suggested alternatives to public sector market intervention while stressing the need for a change of policy direction. A number of aforementioned suggestions may be difficult to accept on the part of public institutions. This is largely because the public institutions in question would be made to undergo restructuring following the withdrawal of market participation functions and to surrender existing profits generated from their market participation. However, alternatives to market participation may vary according to the business type and thus a number of different strategies must be devised and adopted. In the case of Type 1 with the aim of addressing under supply, viable strategies should be based on the fact that the business in question is mostly operating at deficits and its activities are accruing further debt. If a public institution discontinues or downsizes a Type 1 business, itis likely to see its financial structure improving. Since the policy suggested in this paper aims to reduce debt, it must emphasize this advantage in its implementation. Despite being a debt-prone business, it is not easy for a public institution to downsize or disband the business since it has to assume the burden of restructuring as a result. Taking such issues into consideration, it is recommended that the function in question is phased out as opposed to being withdrawn from the market abruptly.

Geared towards market control, Type 2 businesses are not eagerly given up by public institutions. Type 2 businesses aim for two purposes: public interest and profitability. A public institution may avoid the threat of being subject to restructuring if an appropriate alternative to its market participation activity can be found. For example, the Road Traffic Authority might be made to replace its current role with a more supervisory function. In this respect, the government must exert considerable efforts in advance to replace a Type 2 market participation activity with an alternative. This is because of the difficulties in identifying a substitute function for a public institution as seen in the case of the Road Traffic Authority, as well as the extra effort required to compensate for the loss of revenue from surrendering a profitable business function. Type 2 businesses arguably require the most extensive efforts by the government in reducing market participation.

As with Type 2 businesses, public institutions whose business falls under Type 3 simultaneously experience restructuring and a profit drop when abandoning the function of market participation. Therefore, securing funds to compensate for the loss of revenue is a vital issue, which is another aspect in common with Type 2 businesses. However, a key difference is that Type 3 businesses require a review on the necessity and validity of the public project that is cross-subsidized by market participation revenue. Public utilities in current operation are not subject to the government assessment on effectiveness since they areexclusively funded with the public institution's own income without government assistance. If the enterprise is funded through a government budget, however, the scale of government support may be diminished in relation to the income from market participation, and the business must be subject to performance reviews. Ultimately, the public institution in question would face the simultaneous reduction of both its market participation activity and its public enterprise as the beneficiary of cross-subsidization. In this case, therefore, it is desirable to lead the public institution to take steps to close down the profitable business through a competitive bidding with the private sector, rather than abruptly suspending market participation. Type 4 is rather complicated, since it may be the easiest or most difficult to institute an alternative. Focusing on utilizing idle facilities, a Type 4-1 business is relatively easy to replace. Although a Type 4 business has to restructure employees who are in charge of facility management, the scale of restructuring would be not significant overall. On the other hand, Type 4-2 aims to utilize idle human resources, and therefore has to overcome a great obstacle because the business has to undergo human resources restructuring even prior to competing with the private sector. The situation is particularly dire if the market participation activity is a core business of the public institution. In such a case, the scale of restructuring should be made public and then the business phased out.

Reducing the market participation of public institutions is a painful task not only for public institutions concerned but also the government. Market participation by public institutions tends to be tolerated due to the government's intention to promote businesses without budget support. Allowing public institutions to generate profits to fulfill services that should be conducted through tax revenue instead is akin to levying a stealth tax on the private sector. Furthermore, if the inefficiency of the public institution concerned results in greater costs, the negative consequences will be greater. At present, many public institutions combine concerns for the public interest with profit generation in their function. However, it would be more appropriate for public institutions to specialize in projects for the public interest while private enterprises concentrate on profit-making businesses. The government must clearly delineate between the roles of the private and public sectors, whilst providing financial support for the functions of public institutions and leaving the private sector to its own devices.

As discussed throughout this paper, reducing the market participation of public institutions is a painful endeavor for both the government and the public institutions themselves. Therefore, the procedure for evaluating the validity of market participation by public institutions must be included in the functional verification process to be conducted on a regular basis. This was included in the public institution reform plan announced by the Ministry of Strategy and Finance in July 2013 and the public institution normalization measure devised by the same ministry in December 2013. In order to develop this auditory function, the Ministry of Strategy and Finance must serve as the general headquarters, while the boards of directors at public institutions are given the responsibility of final deliberation and resolution. Creating a task force composed of private experts to gather new and creative ideas may be beneficial, but an ad hoc taskforce does not carry the accountability or oversight required by a decision-making body. Instead, it is the responsibility of the Ministry of Strategy and Finance to devise specific measures to examine the functions of public institutions such as market participation through the assistance of expert groups. To do so, the relevant department within the Ministry must be expanded. At present, the existing department at the Ministry is under a heavy workload despite its only duty of managing public institutions. The recent establishment of the Public Institutions Reform Division in the Ministry of Strategy and Finance remains an inadequate effort. The consistent and regular implementation of such functional checks requires the establishment of a permanent and dedicated organization.

References

Ahn, Byeong-yeong, Moo-kwon Chung and Sang-il Han, "Public Sector in Korea: Theory, Nature, and Reform Suggestions," *KAPA Newsletter,* 2007, pp. 425-427.

Akerlof, George A., "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84 (3), 1970, pp. 488-500.

Alchian, Armen A., and H. Demsetz, "Information Costs, and Economic Organization," *American Economic Review*, 62, 1972, pp. 777-795.

Australian Government, The Treasury, Department of Finance and Administration, "Australian Government Competitive Neutrality Guidelines for Managers," February 2004.

Benjamin Kelin and Keith Leffler, "Role of Market Forces in Assuring Contractual Performance," *Journal of Political Economy,* vol. 89, no. 4, 1982, pp. 615-641.

Blöndal, J. R., "Market-type Mechanism and the Provision of Public Services," *OECD Journal on Budgeting*, vol. 5, no. 1, 2005, pp. 79-106.

Cave, M., "Voucher Programmes and their Role in Distributing Public Services," *OECD Journal on Budgeting*, vol. 1, no. 1, 2001, pp. 59-88.

Choi, Eun-hee, Ok-yeon Kim, Jang-kwon Lee and Hyung-soo Park, *Impact of the Bogeumjari Housing Program in the Seoul- Gyeonggi Region on the Local Spatial Structures and Housing Market*, Land and Housing Institute, 2012.

Choi, Yeong-chul, "Applying the Market-Friendliness Test to the Korean Context," *Journal of Local Government Studies*, vol. 4, no. 2, 2001, pp. 367-389.

Choi, Seong-rak, Jeong-in Choi, Jong-woong Park and Jeong-Ah Park, *A Study on the Impact Assessment of the Privatization of Korea Telecommunications (KT): Focusing on a Stakeholder Model*, 2005.

City of Seoul, *Urban Planning Terminology for Dummies*, Urban Planning Bureau, January 2012.

Coase Ronald, "The Nature of the Firm," *Economica*, 4, no. 16, 1937, pp. 386-405.

______, "The Problem of Social Cost," *Journal of Law and Economics*, 3, no. 1, 1960, pp. 1–44.

Do, Hwa-yong, "Introducing the Competitive Bidding System on the Routes of the Seoul Intra-city Buses," February 2000.

Fair Trade Commission, *A 20-Year History of the Fair Trade Commission*, 2002.

______, *OECD Report: Applying the Fair Trade Law to Public Corporations*, 2009.

Grossman, Sanford and Oliver Hart, "The Costs and Benefits of Ownership: A Theory of Vertical Integration," *Journal of Political Economy*, 94, no. 4, 1986, pp. 691-719.

Gwak, Chae-gi, "An Analysis of the Korean Semi-Public Sector and Suggestions for Innovation: Focusing on the Semi-Public Sector Activities of the Central and

Local Government Organizations," Federation of Korean Industries, 2009.

Gwak, Chae-gi and Dong-seok Ok, "Plan for the Introduction of the Market-Friendliness Test into State-Owned Enterprises," *State-Owned Enterprises and the National Policy 2012*, Korea Institute of Public Finance, 2012.

______, *A Study on the Development of the Criteria for the Establishment and Liquidation of Public Corporation Subsidiaries,* Ministry of Strategy and Finance Research Contract Report, 2006.

Han, In-seob, "Limits to the Contracting-out of Administrative Services and the Actual Status of Services Contracted Out by the Central Government," *Journal of Korean Public Administration*, vol. 16, no. 2, Summer 2007, pp. 155-188.

Holstrom, Bengt, "Moral Hazard in Teams," *Bell Journal of Economics,* 13, no. 2, Autumn 1982, pp. 324-340.

Jeong, Jun-hwan, *Analysis of the Price Competition Stimulation Effect of the Distribution of No-Brand Gas Stations*, Korea Energy Economics Institute, 2012.

Cho, Sung Bong, *State-Owned Enterprise Reform*, KERI, 2002.

Ju, Jae-hong, "Implications of Private Finance Initiative (PFI) Projects in the United Kingdom for the Build-Transfer-Lease Projects in Korea," *Journal of National Territorial Research*, vol. 53, June 2007, pp. 241-258.

Kang, In-su, Heung-jae Lee, Yong-kyu Kim, Jin-Hyun Park, Yong-il Kong, Je-guk Yu and Seol-hee Yu, *Achievements and Future Tasks of the Structural Reform of the Communications Sector*, Korea Information Society Development Institute, December 2001.

Kim, Eui-jun, "Ripple Effects of BTL-Type Private Sector Projects on the National Economy," Public debate for the efficient operation of BTL-type private sector investment projects, June 2005.

Kim, Pan-seok, Kil-pyo Hong and Wan-hee Kim, "Sizes of State-Owned Enterprises: What's the Matter?," Paper presented at the Korean Association for Policy Studies (KAPS) Academic Conference, 2007.

Kim, Wan-hee, "Empirical Review for the Greater Rationality of Reforms in State-Owned Enterprises," Paper presented at the Korean Association for Public Administration (KAPA) Academic Conference, 2008.

Korea Customs Service, "KCS Contracts Out Intellectual Property Right Reporting Service (press release)," March 29, 2010.

Korea Information Society Development Institute, *Korean Communications Sector Privatization Strategy*, March 2001.

Korea Institute of Public Finance, *State-Owned Enterprise Management Efficiency Planning: Handbooks, 1998-2012*, December 2012.

Korea Transport Institute, *A Study on the Development of the Criteria for Determining Proper Compensations for Public Railway Services*, 2006.

Korean Society for Public Enterprises, *Functional Tests for Public Enterprises: Approach and Model*, 2008.

Kwon, Oh-seong and Min-jeong Park, “Current Status of Subsidies and Grants as Policy Instruments: Recent Research Trends,” *Public Administration Commentaries*, vol. 47, no. 1, March 2009, pp. 277-309.

Kwon, Oh-seung, *The Role of the State in Economic Competition,* Seoul: SNU Law Research Institute, 2004.

Land and Housing Corporation, *Mid-Term Management Goals (2012-2014)*, October 2011.

Lee, Du-ryeong, *A Study on the Public Service Reform Laws of Japan*, Korea Legislation Research Institute, 2006.

Lee, Eun-gyeong, Og-Jin Ahn and Soo-yeon Jun, *Issues and Tasks of the Financial and Business Management of State-Owned Enterprises with Excessive Financial Debts*, National Assembly Budget Office, October 2010.

Lee, Jun-gu, *Microeconomics*, fifth ed., 2008.

Lee, Jun-woo, Choel-ho Choi and Jung-soon Kim, *Scope of Administrative Functions to be Contracted Out and Follow-up Management*, Ministry of Legislation Research Contract Report, October 2007.

Lee, Ju-seon, “Privatization and Restructuring of State-Owned Enterprises,” *State-Owned Enterprise Commentaries*, 1998, pp. 103-133.

Lee, Seong-woo, “Expanding the Scope of Government Functions to be Contracted Out,” *KAPS Newsletter*, vol. 7, no. 3, 1998, pp. 31-51.

Lee, Won-woo, “Exploration into the Legal Means of the Privatization of Government Functions,” *Journal of Administrative Laws,* 1998, pp. 108-136.

Lee, Yeong, and Seong-rin Rah, *Estimating the Price Elasticity of Tobacco Demand in Korea Using Time-Series Data*, 2007.

Lundsgaard, J., “Competition and Efficiency in Publicly Funded Services,” Economics Department Working Paper No. 331, OECD, 2002.

Metropolitan Transportation Authority, *Finding and Developing Stable Sources of Fiscal Support for the Improvement of Public Transit in the Seoul-Gyeonggi Region*, February 2010.

Min, Hyeon-jeong, “Private-Public Competition for Public Service Reforms,” *Korean Association for Governance Newsletter*, vol. 13, no. 2, 2006, pp. 321-346.

Ministry of Culture, Sports and Tourism, *Advancement and Reform: White Paper on National Affairs under the Lee Myung-bak Administration*, vol. 11, February 15, 2013.

Ministry of Land, Infrastructure and Transport, “KORAIL Structure to Change into Set of Parent and Subsidiary Companies (press release),” June 26, 2013.

______, “Competitive Bidding on Remote Island Route Operations Launched (press elease),” October 1, 2008.

______, “Korean Government Adequately Compensating KORAIL with Annual PSO of KRW 300 Billi on (additional press release),” October 11, 2012.

______, “Announcement of Findings of Review on Railway Automation Support Project (press release),” June 11, 2012.

______, “Korean Government Adequately Compensating KORAIL with Annual PSO of KRW 300 Billion (press release),” October 11, 2012.

______, “Competitive Bidding on Remote Island Route Operations Launched (press release),” September 30, 2008.

______, *Request for Decision Regarding Internal Auditing Results: Special Inspection into the Status of Management of Pier Operating Companies and Remote Island Routes*, June 2012.

Ministry of Planning and Budget, “Government to Make Active Use of Market-Friendly Spending Method (MTMs) in Providing Public Services (press release),” August 30, 2005.

Ministry of Strategy and Finance Private Sector Investment Policy Division, “Basic Plan for Private Sector Investment Projects, 2013 (announcement),” May 2013.

______, *Strategy for Stimulating Private Sector Investment Projects*, July 5, 2013.

______, *White Paper on the Advancement of State-Owned Enterprises*, December 2012.

______, *Third Draft Plan on the Advancement of State-Owned Enterprises*, October 10, 2008.

National Assembly Budget Office, *Analysis of Cost Ceilings on Build-Transfer-Lease Projects 2013*, October 2012.

______, *Analysis of Cost Ceilings on Build-Transfer-Lease Projects 2014*, November 2013.

______, *Evaluation of Government Projects with Private Capital Investments*, September 2005.

______, *Evaluation of the Bogeumjari Housing Program*, 2012.

OECD Working Party on State Ownership and Privatisation Practices, *A Compendium of OECD Recommendations, Guidelines and Best Practices Bearing on Competitive Neutrality*, DAF/CA/SOPP(2011)10/FINAL, 2012.

OECD Working Party on State Ownership and Privatisation Practices, *National Practices Concerning Competitive Neutrality*, DAF/CA/SOPP(2011)9/FINAL, 2012.

OECD, “Competitive neutrality and State-Owned Enterprises: Challenges and policy options,” *OECD Corporate Governance Working Papers,* No.1, www.oecd.org/daf/corporateaffairs/wp, 2011.

Ok, Dong-seok, “Theory and Practice of State-Owned Enterprise Management: A Conceptual Analysis Based on the Transaction Cost Theory,” *Journal of Regulation Studies*, vol. 19, no. 1, 2010, pp. 3-37.

______, *Economics of the Transaction Cost and the Classification Criteria on State-Owned Enterprises*, KIPF, 2013.

Ok, Dong-seok and Jong-seok Han, *A Study for the Improvement of the State-Owned Enterprise Designation System*, National Assembly Budget Office, 2011.

Ouchi, William G., "Markets, Bureaucracies, and Clans," *Administrative Science Quarterly* 25, 1980, pp. 129-141.

Park, Han-jun, "Public Corporation Competition Policies in Major Economies Worldwide: Focusing on the Principle of Competition Neutrality," *Fiscal Forum,* April 2012, pp. 17-33.

_____, "Meaning of Competition Neutrality and Trends Overseas," *KIPF State-Owned Enterprises Trends*, no. 3, 2011, pp. 79-85.

Park, Jeong-su and Seok-hee Park, *Performance Evaluation and Future Tasks of the Privatized Public Corporations*, KIPF, December 2011.

Park, Jeong-su, Han-jun Park, and Jeong-suk Yu, *Current Operating Status of State-Owned Enterprises and Their Relations to the Fiscal Policy in Major Economies Worldwide*, MSF Research Contract Report, December 2011.

Park, Jin, op-ed columns in *The HankookIlbo* (2009), *The Seoul Shinmun* (2012), and *Eco Vision* (2013).

Park, No-uk, *Contracting Out Social Services and Performance-Oriented Contracts: Main Issues and Policy Implications*, January 2009.

Park, Seung-rok, "Analysis of the Productivity of Public and Private Corporations," *Journal of Regulation Studies*, vol. 11, no. 1, 2002, pp. 9-67

Park, Yeong-beom, "Labor-Management Relations at State-Owned Enterprises and Job Creation in Korea," Paper presented at the International Symposium in Celebration of the Opening of the KIPF Research Center for SOEs: Employment Policy and the Role of SOEs, May 2010.

Park, Yong-ju, Taehoon Ahn, Mihee Choi and Kyung-jin Han, *Evaluation of the Bogeumjari Housing Program*, National Assembly Budget Office, February 2012.

Public Procurement Service, "Procurement Services to be Made Faster by Contracting Out Exemplary Procurement Supplier Handling Services (press release)," June 12, 2013.

Schwartz, Gred, and B. Clements, "Government Subsidies," *Journal of Economic Surveys* 13, no. 2, 1999, pp. 119-148.

Seo, Jae-ho, Dae-wook Kim and Hyun-ju Oh, *Survey on Organizations Handling or Assisting Services Contracted Out by the Government*, National Assembly Budget Office, December 2012.

Seung, Jeong-heon, and Ju-hyeon Son, "Privatization Policy Evaluation," *State-Owned Organizations and the National Policy 2012*, KIPF, 2012.

Son, Sang-yeong, Sa-hyuk Kim amd Hee-yeon Kim, *Searching for a New Paradigm*

on the Communications Policy, December 2008, Korean Association for Policy Studies (KAPS) Academic Conference, 2007.
Swedish Competition Authority, *The Swedish Competition Authority Annual Report 2012,* http://www.kkvse/upload/File/ENGPublications/annual_report_2012.pdf, 2013.
Williamson, Oliver, *Markets and Hierarchies: Analysis and Antitrust Implications,* 1975.
Yang, Nan-ju, "Analysis of the Characteristics of Social Services in Korea on the Supply Side: Grants and Vouchers," *Social Welfare Policy*, vol. 38, no. 3, September 2011, pp. 191-219.
Yu, Han-uk, *Suggestions for the Application of Market Principles Toward Greater Fiscal Efficiency: Focusing on the Voucher Program*, KDI, 2006.
Yun, Keon, "Tasks of the Evidence-Based State-Owned Enterprise Reform Policy," Paper presented at the KAPA Summer Conference, 2012.

88 Country Club, http://www.88countryclub.co.kr.
Academy of Korean Studies, *Encyclopedia of Korean Culture*, http://encykorea.aks.ac.kr.
ALIO (state-owned enterprise management information disclosure system), http://www.alio.go.kr.
Korea Appraisal Board, http://www.kab.co.kr.
Swedish Competition Authority, http://kkvse/default_218.aspx.