

2007 KDI International Conference

Competition Policy in Regulated Sectors:
Focusing on the Institutional Design of the Relationship between
Competition Authority and Sectoral Regulators

규제산업의 경쟁정책:
각 산업의 감독당국과 경쟁당국 간 관계에 대한 제도 설계를 중심으로

July 10~11, 2007

Main Conference Hall
Korea Development Institute

Competition in the Broadcasting Industry in Korea

Suil Lee

Korea Development Institute

1. Introduction

During the period of 1999~2004, the number of employment and the sales *per capita* of the broadcasting industry have grown at the rates of 8.3 percent and 5.4 percent respectively. On the other hand, the average annual growth rates of those variables of total service industries during the same period were just 4.1 percent and 3.6 percent respectively. Also, *per capita* income in the broadcasting industry was more than three times of the average income of total service sectors in 2004. Furthermore, an analysis of Input-Output Tables of Korea easily reveals that the broadcasting industry has a very strong production-induction-effect and employment-induction-effect over total industries.

Despite the economic importance of the broadcasting industry, however, the competition in the industry in Korea has been strictly managed with a variety of regulations under the initiative for 'securing public interest in broadcasting' which calls

for proper representation of the media, program diversity, and national identity. However, progress in technology and convergence between the broadcasting and telecommunication sectors in the 1990s and 2000s have put the regulations applied to the broadcasting industry in question. The progress in the digital technology and the expansion of broadband electronic transmission networks are weakening the grounds of the regulations such as the scarcity of radio waves and the passive reception by audience of one-directional broadcasting contents. Furthermore, the convergence between the broadcasting and telecommunication sectors in terms of technology, service, and business has been putting significant competitive pressure on the broadcasting industry. In addition to those structural changes, the efforts of rebalancing the traditional policy objective of ‘securing public interest of broadcasting’ with a newly rising policy objective of ‘enhancing social welfare by introducing or revitalizing competition’ has been observed in foreign countries, in particular, the European Union.

Reflecting this trend, in the paper, I reexamine the grounds of a couple of essential regulation currently applied to the broadcasting industry in Korea from the perspectives of the policy objectives of ‘securing public interest of broadcasting’ and ‘enhancing social welfare by revitalizing competition’, and suggest several policy recommendations to enhance social welfare. More in detail, analysis will be conducted separating free-to-

air broadcasting market and multi-channel pay TV market. For each market, the paper analyzes the market structure and the current competitive situation, and identifies essential regulations hampering market competition systematically. Subsequently, the bases of those regulations will be reexamined and alternatives will be suggested from the perspective of the above-mentioned two policy objectives.

The remainder of the paper is organized as follows. In Section 2, I show that so-called ‘KOBACO system’ is conditioning systematically the competition structure of the entire free-to-air broadcasting industry in Korea, including audience market and outside production market, let alone broadcast advertising market. Subsequently, I critically reexamine several grounds of the KOBACO system currently asserted and explain a variety of inefficiencies resulted from the KOBACO system. Based on the analysis, I also suggest an alternative system substituting the current KOBACO system to introduce competition into the broadcast advertising market. In Section 3, I analyze the market structure and current status of competition in the multi-channel pay TV market and show that no existence of actual competition among platform operators is the most essential factor explaining various inefficiencies and distortions observed in the pay TV market. I also explain that the absence of serious competition on the platform level is directly related to a policy objective of ‘realizing localism’. Based on

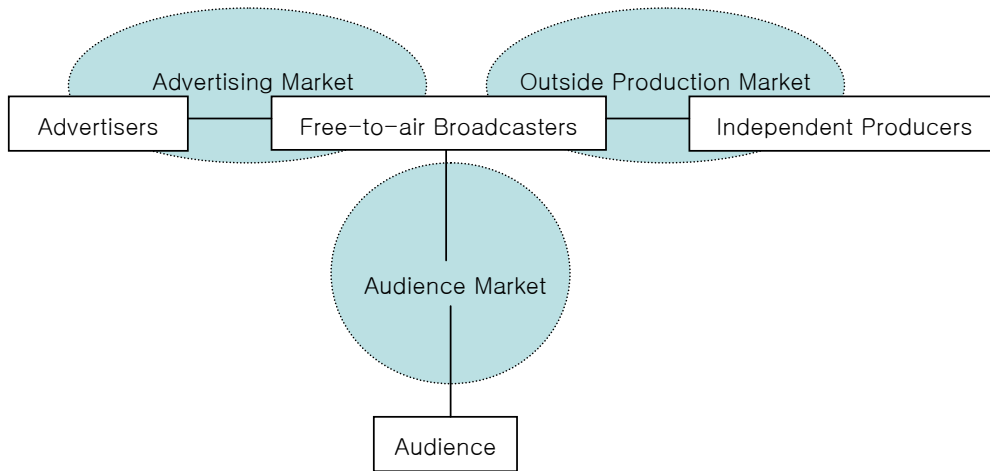
the analysis, the paper will extensively deal with number of suggestions of early introduction of a new platform, IPTV, and alleviation of current market share regulation in the broadcasting sector and bundling regulation in the telecommunication sector as ways of revitalizing the competition on the platform level. Finally, Section 4 concludes the analysis by summarizing the results and suggesting a couple of policy recommendations.

2. Free-to-air Television Market

2.1 Market Structure and Current Status of Competition

As shown in Figure 2-1, free-to-air television market is composed of advertising market, outside production market, and audience market. In Korea, there are 32 free-to-air TV broadcasters and 11 radio broadcasters as of 2005. They mediate the advertising market, outside production market, and audience market as providers of advertising spaces, orderers of outside-produced contents, and transmitters of broadcasting signals, respectively.

Figure 2-1 Structure of Free-to-air Broadcasting Market



As mentioned in the introduction, the free-to-air TV market in Korea is very different from other markets in that its competition structure has been heavily conditioned by a variety of regulations intended to promote ‘public interest in broadcasting’. For example, in the advertising market, the entire advertising time of free-to-air broadcasters should be sold through a monopolistic media representative, ‘Korea Broadcasting Advertising Corporation (KOBACO)’ by ‘KOBACO Act’ enacted in 1981, and advertising prices are also regulated by the KOBACO. Regarding the outside production market, each free-to-air TV broadcaster is obliged to compose a certain stipulated portion of its broadcasting time with multimedia contents made in the outside production market, which restricts the broadcaster’s choice between the inside production and the outside production of multimedia contents. Moreover, the Korean government also restricts the

competition among broadcasters in the audience market by imposing rules which put some limit on the broadcasters' composition activity in regards to the origin and genre of content.

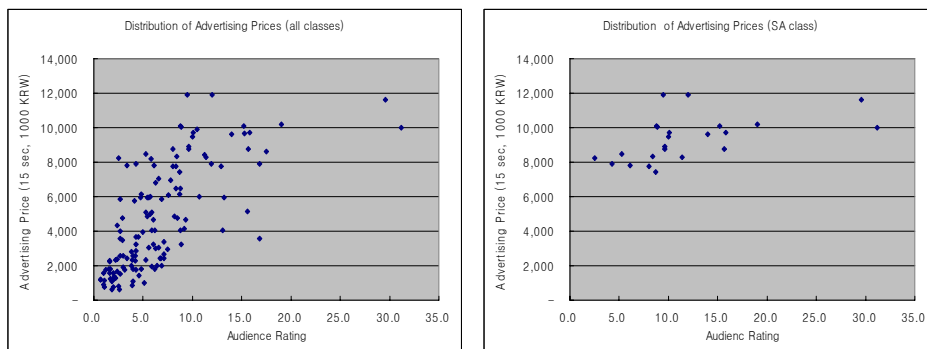
Among those regulations, the monopolistic representations of sales of advertising time and price regulation by the KOBACO, referred to as 'KOBACO system', are the most influential regulation in the free-to-air broadcasting market. The system does not only affect directly the structure and current status of competition of the advertising market, but also affects indirectly the mode of competition in the outside production and the audience market, which will be explained in Section 2.1.2 more in detail.

2.1.1 KOBACO System and Its Grounds

In Korea, the free-to-air broadcast advertising market can be characterized as 'KOBACO system' in which a state-owned media representative, KOBACO monopolistically represents the sales of entire advertising time allowed to the free-to-air broadcasters. The KOBACO system has lasted since 1981. As of today, the KOBACO sells advertising time on behalf of 35 broadcasting media including regional private broadcasters and religious broadcasters. In addition to the monopolistic representation of sales, the system also has price regulation as one of its main component. In the

system, advertising price is not determined by market demand and supply, but assigned by the KOBACO who, besides of market demand and supply, also considers several policy objectives such as ‘the restraint of rise of prices’ and ‘the provision of stable revenues to free-to-air broadcasters’ in its pricing activity. Nowadays, when pricing advertising spaces, the KOBACO is known to assign only a weight of approximately 1/6 to audience ratings, which are the most important or the almost unique determinant of market demand of advertising spaces. Due to this practice, prices of SA class advertising spaces, in particular, hardly reflect differences in the audience ratings, as shown in Figure 2-2.

Figure 2-2 Audience Ratings and Advertising Prices (June 2005)



As the advertising prices do not fully reflect the market demand, it is natural to observe excess demands in popular advertising spaces and excess supplies in unpopular

advertising spaces. To deal with these pieces of market distortion, the KOBACO bundles popular advertising spaces and unpopular advertising spaces across the broadcasters and arbitrarily allocates those bundles to a part of advertisers at a given price.

Specifically, table 2-1 summarizes the distribution system of free-to-air advertising time in major foreign countries. In contrast to Korea, in almost all foreign countries, advertising spaces are sold by internal sales departments of broadcasters or through media representative subsidiaries.¹ Particularly, the Netherlands have a formal semblance to Korea, but they have only public broadcasters different from Korea where public broadcasters coexist with private broadcasters. This difference in the market structure of free-to-air broadcasting make it somehow meaningless to derive a certain implication directly from the formal similarity of distribution system of advertising time between the two countries.

¹ National broadcasters in the U.S. and private broadcasters in Japan, which are not included in Table 2-1, sell their advertising spaces by internal sales departments.

Table 2-1 Distribution System of Advertising Spaces in Foreign Countries

Country	Classification	Broadcasters	Media Rep.	Characteristics
BK	Public	BBC Ch4 S4C	No advertising Internal department Internal department	
	Private	Ch5 ITV(Ch3) - Granada Group - Carlton Group	Internal department Granada Enterprise Carlton Media Sales	Subsidiary Subsidiary
France	Public	FT Arte	FTP No advertising	Subsidiary
	Private	TF1	TF1 Publicite	Subsidiary
		M6 Canal+	M6 Publicite Canal+ Regie	Subsidiary Subsidiary
Germany	Public	ARD	ARD Sales & Services	Subsidiary
		ZDF	ZDF Werbefernsehen	Subsidiary
Italy	Public	Rai	SIPRA	Subsidiary
	Private	Mediaset	Pubblitali	Subsidiary
Netherlands	Public	Governmental Public (2) Non-governmental Public (6)	STER	Government

Then, it is righteous to ask the reason why the Korean government established the KOBACO system and what kind of argument provides foundations to the KOBACO system. Since the introduction of the KOBACO system, the following grounds have been suggested in favor of the system. By separating the sales activity of advertising time from the activity of producing and composing broadcasting contents, we may avoid the following events: ① close ties between broadcasters and advertisers; ② intensification of competition for audience rating among broadcasters and the

production of low-quality broadcasting contents; and ③ a decrease of supply of public interest broadcasting contents. The price regulation in the system will also contribute to maintaining stable prices by restraining advertising prices from increasing in a large scale.

Above-mentioned arguments for the KOBACO system, however, do not have any sound bases. At first, close ties between broadcasters and advertisers are likely to be avoided if competition among broadcasters is revitalized by introducing competition into the free-to-air broadcast advertising market. Yardstick competition, in particular, with public broadcasters who do not sell any advertising time and reputation effect constrain broadcasters' incentive to make contents biased for specific advertisers.² The concern that an intensified competition for audience rating among broadcasters may result in an increase in the degrees of nudity and violence of contents is not empirically well founded. When it comes to the supply of public interest contents such as educational, cultural, and documentary programs, it will be a more effective and efficient way for a steady supply of those programs to impose a quota for a specific genre or provide a subsidy to the production of public interest contents rather than

² Yardstick competition in the broadcasting market means that impartiality of a specific broadcaster can be tested by comparing its contents with those of other broadcasters since a specific case is usually dealt by multiple broadcasters at the same time. Specifically, reports from other broadcasters play a role as a 'yardstick' for testing whether a specific broadcaster provides distorted information or not.

restraining competition for audience rating. The final argument for the KOBACO system that advertising prices should be maintained at lower levels in order to prevent a general price level from rising is based on an assumption that a rise of advertising prices will cause an increase of advertising budgets of advertisers, finally resulting in an increase of final products' prices. This assumption, however, seems to be unrealistic, considering that advertisers, in general, allocate a pre-determined advertising budget over various media according to their respective advertising efficiencies and that final product markets may be under intensive competition.

2.1.2 Inefficiencies of KOBACO System

The previous subsection explained the KOBACO system do not have any sound bases for its existence. To make matters worse, the system brings about a variety of inefficiencies in the audience market and outside production market, let alone the advertising market. In this subsection, reflecting the fact that the KOBACO system has two main components of monopoly and price regulation, I will explain inefficiencies produced from the monopolistic representation of sales and those from the price regulation in turn.

At first, the monopolistic representations of sales of advertising spaces by the

KOBACO has the potential problems of deterioration of agency service quality and overpricing of service, as usually observed in monopoly situations.

When it comes to the price regulation, it may distort competition in the all three markets consisting of the free-to-air broadcasting market. At first, the price regulation brings about excess demands for popular advertising spaces and excess supplies of unpopular advertising spaces in the advertising market. As mentioned before, the KOBACO addresses those problems by bundling advertising spaces over broadcasters and assigning those arbitrarily. However, this practice causes a sizable deadweight loss even when the supply of advertising time is assumed to be perfectly price-inelastic, except an extreme case.

Second, regarding the audience market, under the KOBACO system free-to-air broadcasters may lose an incentive of competing for audience rating with high-quality contents, since their advertising revenues are not linked to the audience rating. In particular, an increase in the audience rating does not generate a proportional increase in the advertising revenues. In this situation it may be reasonable for the profit-maximizing broadcasters to focus on reducing production costs rather than producing high-quality programs. The prevalence of simple mimic of popular broadcasting programs in foreign

countries may reflect that incentive change of the broadcasters.

Lastly, the price regulation of the KOBACO system causes inefficiency in the outside production market in several ways. First, the restriction of competition among the broadcasters in the audience market is connected to the diminution of competition among broadcasters for high-quality outside products, and thereby the supply of high-quality outside product will be at a lower level, compared to a situation in which the broadcasters compete intensely for high-quality outside products. Second, the restriction of competition among the broadcasters for the outside products may result in the broadcasters' prominent position in transaction with outside producers, which may lead to the concentration of copyrights of outside products to the free-to-air broadcasters. This practice of transferring all copyrights of outside products to the broadcasters hinders domestic and foreign investors from participating in the outside product market. Third, considering that the advertising revenues account for approximately 95 percent of total revenues of the free-to-air broadcasters in nowadays, the price regulation by the KOBACO is a rate-of-return regulation indeed. Furthermore, there is a widely accepted theoretical result that a rate-of-return regulation creates an incentive for regulated firms to over-invest in tangible assets, which is called 'Averch-Johnson Effect'.³ Then, the

³ H. Averch & L. Johnson(1962)

price regulation of the KOBACO system will give an incentive for the broadcasters to over-invest in tangible assets, and this distortion of incentive may distort the decision making of the broadcasters in choosing between inside production and outside production of broadcasting contents, ultimately, resulting in cases where broadcasting contents are produced by relatively inefficient broadcasters rather than efficient outside producers.

In previous discussion, I have shown that the KOBACO system brings about various inefficiencies by distorting competition in the advertising market, audience market, and outside production market, while the arguments suggested to justify the KOBACO system are unrealistic or empirically unfounded. Therefore, it may be possible to increase social welfare by introducing competition into the free-to-air broadcast advertising market without any damage on the policy objective of securing public interest in broadcasting.

2.2 Introducing Competition into Free-to-air Broadcast Advertising Market

Based on the discussion in the previous subsection, now I suggest a concrete plan to introduce competition into the free-to-air broadcast advertising market.

In principle, the advertising prices should be determined by market demand and supply, not by a regulation, and each free-to-air broadcaster should be entitled to choose its own method of selling its advertising time among internal sales department, media representative subsidiary, or independent media representative. These principles of 'perfect competition' need to substitute the current KOBACO system and we may need a transition period of two or three years for a soft system switch.⁴

During the transition period, the sales of advertising spaces of public broadcasters, KBS2 and EBS, will be represented by the KOBACO. After the transition period, each of the public broadcasters will be entitled to choose its method of selling the advertising time willfully.

When it comes to the other broadcasters, during the transition period, ① they may be forced to use independent media representatives or ② they may be entitled to choose a method of sales freely. Considering that the inefficiencies of the KOBACO system come mainly from its price regulation, the choice between the two schemes may be a secondary problem as long as the advertising prices are determined by market demand and supply. While the second scheme can be regarded more desirable from the

⁴ In the 'perfect competition' system, it may be important to cope with a potential problem that all the major free-to-air broadcasters utilize a common media representative to reduce competition among them and monopolize the advertising market.

viewpoints of the broadcasters' right to choose their sales methods of their own will and the credibility of the system switch, the first scheme is also worth considering seriously for restricting advertisers' influences on the broadcasters and softening the system switch. If we choose the first scheme, it will be important not to designate a specific media representative to serve each of the private broadcasters. The designation practice may impair the designated media representative's incentive to serve efficiently.

In regards to the establishment of media representatives, any restrictions on the ownership of the broadcasters, domestic large corporations, or foreigners will be unnecessary in the medium- and long-term. If we implement the first scheme fearing advertisers' influences on the broadcasters, however, a limitation can be placed on the broadcasters' ownership of newly established media representatives for a while and then phased out. Regarding the entry of new media representative, a registration system will be desirable in principle. However, being concerned about an excess entry of new media representatives, a license system can be enforced for the transition period. Mutual investment among media representatives may be banned to maximize competition among them. In the same context, the investment of the KOBACO to newly established media representatives should be prohibited.

One of the main reasons why the KOBACO system has maintained despite its many defects is the opposition against a system change from minor broadcasters, who have gained a significant amount of rent from the current system and whose existences are reasonably assumed to be threatened by a system change. For those broadcasters, it may be possible to subsidize some portion of their advertising revenues temporarily for about three to five years, using Broadcasting Development Fund.

3. Multi-channel Pay Television Market

3.1 Market Structure and Current Status of Competition

As shown in Figure 3-1, the multi-channel pay television market has a similar market structure to the free-to-air broadcasting market in that program providers (PP)⁵ and platform operators such as system operators (SO)⁶ and a direct broadcast satellite (DBS) operator mediate advertising market, audience market, and outside production market. However, the multi-channel pay TV market is distinguished from the free-to-air broadcasting market in that the function of producing broadcasting contents and composing those into a programming and the function of bundling programmings into a

⁵ A program provider make an exclusive use contract of a specific channel with free-to-air broadcasters, system operators, or DBS operator.

⁶ System operators operate cable broadcasting stations and are called cable TV along with program providers. They provide broadcasting service through wireline and each of them usually has a monopolistic position in its chartered broadcasting area.

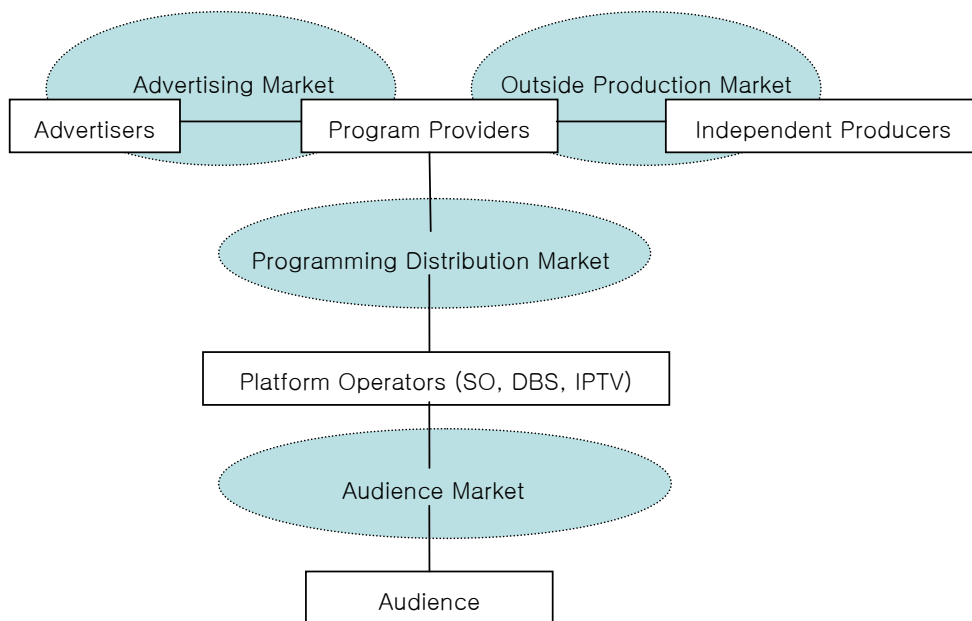
package and transmitting broadcasting signals to audience are clearly separated in the multi-channel pay TV market whereas the two functions are internally integrated in the free-to-air market. The former activity is conducted by PPs and the latter is conducted by platform operators. Accordingly, in the multi-channel pay TV market, there is an additional market called 'broadcasting programming distribution market' where broadcasting programmings are traded between PPs and platform operators. In the multi-channel pay TV market, platform operators connect an upstream market, *i.e.*, the broadcasting programming distribution market and a downstream market, *i.e.*, the audience market or pay TV service market.

In the pay TV market, a receiving fee from subscribers is a basic source of revenues for the PPs and platform operators. A PP's revenues are composed of advertising revenues and some portion of receiving fees given by platform operators in exchange for a broadcasting programming. In Korea, the pay TV service market is composed of 77 broadcasting areas or service areas, and 119 chartered SOs and one DBS operator are currently in business. Among those SOs, 88 SOs make up 8 MSOs (Multiple System Operator) through horizontal affiliation.⁷ As of 2005, 144 registered PPs are providing

⁷ In Korea, the biggest MSO is Taegwang who possesses 22 SOs nationally. C&M and CMB are the next biggest MSOs, each of whom possesses 17 SOs. As of June 2005, 79 SOs belong to seven leading MSOs and they account for 71.5% of total number of cable TV subscribers and 70% of total cable TV revenues.

programmings to the platform operators. There are also many MPPs (Multiple Program Provider) which hold multiple PPs.⁸ Furthermore, a SO and a PP can be vertically affiliated, making up a MSP (Multiple System Provider). OnMedia and CJ are representatives MSP in Korea.

Figure 3-1 Structure of Multi-channel Pay Television Market



3.1.1 Restriction of Competition on Platform Level and Realization of Localism

A prominent characteristic of the multi-channel pay TV market in Korea is that competition on the platform level is considerably limited and most SOs are market

⁸ In Korea, OnMedia and CJ are major MPPs and they possess six PPs and four PPs, respectively. Some of free-to-air TV broadcasters also possess multiple PPs. For example, KBS, MBC, and SBS have two, three, and four PPs, respectively, as their subsidiaries.

dominant players in their respective chartered broadcasting area. As of June in 2005, 35 broadcasting areas are monopoly areas and there is only one SO in business in each of those areas. Each of the remaining 42 broadcasting areas has two SOs. But, that number includes 18 overbuild areas where two SOs belong to the same MSO. Each of them may be regarded as another monopoly area from the viewpoint of actual competition. Therefore, in only 24 broadcasting areas out of the total 77 areas, there is actual competition between two SOs. The market share of the DBS, which has been expected to compete with the cable TV since its launch in 2002, is just 13.5% as of June in 2005. This implies that the DBS may not put any considerable competitive pressure on the cable TV. A recent empirical research reports that subscribers' utility in the monopoly areas is significantly lower than that in the competition areas, which provides indirect evidence on the above conjecture on the DBS' failing role (Rhee & Lee, 2007).

A characteristic of general network industries, that is, the economy of scale, can easily be pointed one of key reasons for the limited competition and the maintenance of monopolistic market structure on the platform level. But the delayed competition on the platform level is also directly related to a policy objective of the 'realization of localism'. In the aspect of multi-channel pay TV market, it has been generally asserted that the localism can be embodied if each SO based on a specific local area operates its

own channels composed of local contents. For the operation of local channels, it has also been argued that the government needs to secure **stable** revenues of the SOs. These arguments for the localism was reflected in the government policy and resulted in the current status of competition on the platform level. Considering that the policy objective of realizing localism in the context of broadcasting has been pursued continuously by local free-to-air broadcasters, it is very difficult to find a sound ground for pursuing the same policy objective even in the pay TV market.

3.1.2 Restriction of Competition on Platform Level and Inefficiencies

In the previous subsections, I explained that the platform operators connect the broadcasting programming distribution and the audience market and that most SOs are market dominant players in their respective chartered broadcasting area. Now I will provide several pieces of evidence on inefficiencies that the limited competition on the platform level gives rise to in the broadcasting programming distribution market and the audience market.

Let me start with the SOs' unfair behaviors in the broadcasting programming distribution. The most prominent phenomenon with apparent anti-competitive flavor in the broadcasting programming distribution market is that the two major MSPs in Korea,

OnMedia and CJ, have prohibited their popular programmings from being broadcasted in the DBS since the entry of the DBS into the market in 2002 and this practice is being continued even nowadays. As of today, OnMedia and CJ possess six and eight SOs respectively. However, their market shares are just 3.8 percent and 11.9 percent of the total number of subscribers, respectively. Therefore, each of them may not have any incentives to make content differentiation between its affiliated SOs and a competing platform operator, the DBS operator, by refusing to trade its popular programmings. Rather, it would be more profitable for them to trade with the DBS operator who gives away a larger portion of receiving fees to the PPs.⁹ It may be more reasonable to find an answer to the question of why the major MSPs are refusing to trade with the DBS operator from the market structure on the platform level in which the SOs are holding the market dominant position. There is a strong likelihood that the SOs may ask implicitly OnMedia and CJ not to do business with the competing DBS operators using their market dominance. In exchange, the SOs may promise them to include their programmings in a package with the largest number of subscribers, and thereby, granting a potential increase in the advertising revenues of OnMedia and CJ.

Besides the above mentioned anti-competitive behavior of the SOs against the

⁹ While each SO allocates approximately 13% of total receiving fees to the PPs nowadays, the DBS operator allocates a half of receiving fees to the PPs.

competing platform operator, there have been many cases in which the SOs conducted unfair behaviors against the PPs. Recently, the Fair Trade Commission in Korea prosecuted 31 SOs for conducting unfair behaviors against the PPs, such as changing the composition of channels or packages *ex parte* without any consultation with the PPs. In fact, the prevalence of the SOs' unfair behaviors against the PPs reflects the SOs' superior position in trading broadcasting programmings with the PPs. Since 2000, the SOs' relative bargaining position has been continuously strengthened as the PPs competed intensely with one another in order to secure channels for broadcasting their programmings in the market dominant platform operators, the SOs. In particular, the change of entry system applied to PP from a licensing system to a registration system and the change of bargaining scheme from a collective bargaining between SO council and PP council to individual bargains in 2001 weakened the PPs' relative bargaining position abruptly. Reflecting these changes in the relative bargaining positions, the proportion of receiving fees distributed to the PPs has rapidly declined from 33.8 percent in 1997 and 1998 to 20.9 percent in 2002, and to 13.2 percent in 2003 respectively.

When it comes to the audience market, inefficiencies from the limited competition on the platform level becomes more apparent. Recently, several cases are reported that SOs

have been abusing their respective market dominant power in some of monopoly areas. They increased the receiving fee by 50~100 percent at a time, even though any changes in price should be previewed and acknowledge by the government. They also changed *ex parte* the contract scheme for a group subscription of an apartment house from a union contract to individual contracts.¹⁰ Together with the above mentioned empirical findings in Rhee & Lee (2007), an empirical result in Lee & Lee (2005) showing that about ten more channels are provided in the same level of packages and prices are lower by about eight percent in the competition areas compared to the monopoly areas, provides a couple of indirect evidences on the SOs' abuse of their respective market dominant power in the audience market.

So far, I explained it may be very unreasonable to restrict systematically competition on the platform level with the intension of realizing localism in the multi-channel pay TV market. I also pointed out that the unfair behaviors and the abuse of market dominant position by the SOs are occurring quite often in the broadcasting programming distribution market and the audience market. The consideration of these leads us straightforwardly to the conclusion that we needs to revitalize competition on the platform level, thereby seeking the development of the pay TV market as a whole

¹⁰ In the past, a group of consumers from an apartment house could buy cable TV service at 50 percent discounted price through a union contract.

and maximizing social welfare.

3.2 Promoting Competition on the Platform level

Based on the discussion in the previous subsection, I suggest concrete plans for reactivating competition on the platform level in this subsection. A straightforward way of increasing competition on the platform level will be to introduce an alternative platform. In this sense, IPTV (Internet Protocol TV) should be introduced into the market as early as possible. The IPTV provides a variety of one-directional and bi-directional broadcasting and telecommunication services including real time broadcasting service, broadband internet service, internet phone service, VOD (Video on Demand) through IP-based telecommunication networks such as xDSL and FTTH. Different from the DBS, the IPTV is expected to put considerable competitive pressure on the incumbent market dominant platform operator, the SOs, since the IPTV will be able to provide bundling packages of broadcasting and telecommunication services as easily as the SOs. In addition to the introduction of the alternative platform operators, we need to alleviate a current market share regulation applied to the SOs in order to appease the opposition of the SOs to the introduction of the IPTV and make it easy for potential IPTV providers to enter the market. However, alleviating that regulation may

result in an expansion of market dominance power of the SOs in the broadcasting programming distribution market. Therefore, mitigating the market share regulation in the pay TV market should be accompanied by the government policies securing and promoting the early development of the IPTV. Lastly, competition modes in the multi-channel pay TV market will be centered on the provision of TPS (Triple Play Service: wireline phone service + broadband internet service + real time broadcasting service) or QPS (TPS + wireless phone service) in the near future. Therefore, we also need to mitigate a current regulation regarding the bundling of services by telecommunication service providers in order to provide potential IPTV providers with a level playing field to compete with the incumbent SOs whose bundling sales are already allowed.

3.2.1 Early Introduction of IPTV

The delay of introduction of the IPTV in Korea is fundamentally due to the fact that legislative and regulation systems and regulatory bodies are separated for the broadcasting and telecommunication industry, despite of a current trend of the rapid convergence between the two industries from aspects of networks, services, and businesses. Up to recently, the broadcasting commission has attempted to entitle the IPTV service as one of various broadcasting services by interpreting broadly the current

stipulations regarding the cable TV service or by creating a new category of broadcasting services such as ‘special broadcasting services’ or ‘multimedia broadcasting services’. On the contrary, the ministry of information and communication has tried to connote the IPTV service into the category of additional telecommunication services and made a special bill which stipulates the entry procedure of broadband convergence services including IPTV service. Of course, it is a well known fact that the opposition of the SOs to the introduction of the IPTV lies behind the conflict between the two regulatory bodies.

Therefore, an optimal solution to the current conflict related to the entry of the IPTV service will be to substitute a current vertical regulatory scheme with a horizontal regulatory scheme and unify the broadcasting- and telecommunication-related regulatory bodies and acts.¹¹ However, considering that the delayed introduction of the IPTV are currently bringing about a sizable social welfare loss and that the transformation of the regulatory scheme and the unification of related acts may require a plenty of time, it would be necessary to contrive a plan to introduce the IPTV service into the market as early as possible even before transforming the regulatory scheme into

¹¹ Different from the current vertical regulatory scheme where the broadcasting services and the telecommunication services are treated differentially, the horizontal regulatory scheme, in principle, does not put any differences on the two categories of services. Instead, it classifies related services into the content services and transmission services and applies differential regulations accordingly.

a horizontal regulatory scheme.

Since the issue of making up a plan for introducing the IPTV service is an essential part in the discussion of switching the regulatory schemes, a plan for the early introduction of the IPTV should be designed, considering a principle of ‘same service, same regulation’ and a policy objective of ‘early transition to the horizontal regulatory scheme’.

The principle of ‘same service, same regulation’ is a core in any horizontal regulatory schemes, and says that transmission services regarded as identical from the viewpoint of consumers should be applied the same regulation, irrespective of differences in transmission technology and network. From the consumers’ viewpoint, the IPTV is expected to provide very similar services to the current digital cable TV. Therefore, the application of the principle of ‘same service, same regulation’ indicates that the same regulation be applied to the IPTV as the digital cable TV in most regulatory areas, including but not limited to: entry regulation, content review, composition of programmings, composition of channels, advertising, must-carry of designated free-to-air broadcastings, and contribution to the Broadcasting Development Fund. For price regulation, however, we need a different approach. Currently, a SO who wants to

change its price is required to pre-obtain acknowledgement from the Broadcasting Commission since the SOs are mostly market dominant players in their respective broadcasting areas. However, newly entering IPTV providers except KT will have no market power, and therefore it will be sufficient to require them just to notify their pricing to the government, instead of getting acknowledgement.¹² The current market share restriction applied to the SOs, in particular, based on the number of broadcasting areas should also be reconsidered since the application of the same restriction under the principle of ‘same service, same regulation’ may hinder the entry of new IPTV providers, which will be discussed more in detail in the next subsection. In conclusion, this kind of plan for introducing the IPTV faithful to the principle of ‘same service, same regulation’ may be accepted into the current broadcasting law by revising some relevant clauses.¹³

¹² The condition for KT is very different from other potential IPTV providers. As a market dominant player in the areas of wireline phone service and broadband internet service, in effect, KT has been prohibited from bundling wireline phone service and broadband internet service with broadcasting services. In the near future, deregulation may allow KT to bundle those services. But, even in the deregulation environment, KT will be required to pass an imputation test before selling bundled services in the market since it is a monopolistic provider, in particular, in the local wireline phone service market. In this sense, the pricing of KT will always be required to **get acknowledgement** from the government, regardless of deregulation process. The above mentioned imputation test takes the following steps: ① standards on predatory pricing in the competition law are applied to the degree of discount of bundled services; ② if a real price of secondary service (= a price of bundled services – a price of main service) is equal to or bigger than its long-run incremental cost, then the price of bundled services is regarded as reasonable.

¹³ The special bill made by the ministry of information and communication simply repeats the relevant clauses of the current broadcasting law in most regulatory areas. Therefore, it seems to be very questionable to enact a special law separately to deal with the entry of the IPTV from the aspect of the principle of ‘same service, same regulation’.

In designing the scheme for the entry of the IPTV, the policy objective of ‘early transition to the horizontal regulatory scheme’ should also be seriously considered, even though this policy objective may not be as important to pursue as the principle of ‘same service, same regulation’. From the aspect of the policy objective of ‘early transition to the horizontal regulatory scheme’, it may be more desirable to enact a special law to deal with new convergence services including the IPTV service and to apply lighted regulations to the IPTV service compared to those applied to the current digital cable TV. This plan of enacting a special law can be more desirable than that of revising the current broadcasting law faithful to the principle of ‘same service, same regulation’ in that it will stimulate the deregulation for other platform operators such as the SOs and the DBS, and therefore, speed up the transition to the horizontal regulatory scheme. However, this plan has a potential problem of resulting in an unfair playing field to the incumbent platform operators in case that the deregulation for those operators takes a considerably long period of time.

3.2.2 Alleviating Market Share Regulation in the Multi-channel Pay TV Market

As mentioned in the previous subsection, the current market share regulation applied to the SOs needs to be revised to make it easy for potential IPTV providers to enter the

market when the introduction of the IPTV is implemented by revising the current broadcasting law, or to provide a level playing field to the incumbent platform operators in case that the introduction of the IPTV is stipulated in a special law.

3.2.2.1 Market share regulation in the pay TV market and its problems

In Korea, a variety of entry and ownership regulations are being applied to the free-to-air broadcasters, SOs, DBS operator, PPs, and network operators. Among those regulations, the regulation on the horizontal merger or affiliation of the SOs is attracting policy makers' attention currently, reflecting the trend of a rapid convergence between the broadcasting and telecommunication industries. As of today, a specific SO is prohibited from managing combining cable TV stations in excess of 33 percent of the total sum of revenues of the SOs or in excess of 20 percent of the total number of the broadcasting areas. This regulation can be understood as a market share regulation specialized in the cable TV markets which are divided into 77 broadcasting areas. Of the two restrictions of the market share regulation, the second one based on the number of business areas is currently binding. In particular, Taegwang, the biggest MSO in Korea, is currently managing combining 22 SOs in 15 broadcasting areas, and therefore it is impossible under the current regulation for Taegwang to expand its business to other

메모 [김대형1]: How about combining two subsections under the new title “**Alleviating Market Share Regulation in the Multi-channel Pay TV Market and its Complications**”

broadcasting areas.

In fact, the audience market or pay TV service market is not relevant to the above market share regulation, since a merger of two SOs from different broadcasting areas does not change at all the degree of competition in the relevant audience markets. Rather, the market share regulation was devised to secure competition in the upstream market, the broadcasting programming distribution market. In case that several gigantic MSOs are formed through horizontal mergers among the SOs, those may abuse their market dominant power to restrict competition in the broadcasting programming distribution market.

However, the current market share regulation based on the revenues and the number of operating areas contains the following problems: ① It results in various inefficiencies related to the operational sizes of the SOs; ② The content of regulation does not match with the objective of the regulation; ③ A relevant market is mistakenly defined. At first, the restriction on the horizontal merger among the SOs makes it difficult to realize the economy of scale and develop and introduce a new high-quality programming. It also impedes a SO's investments for technology innovation by limiting the SO's ability gathering a sufficient number of subscribers enough to make the

investments. This lack of investment may result in retarded modernization or digitalization of the SOs' facilities, and the retarded modernization of the facilities may provide the SOs with a ground for opposing the entry of the IPTV.

Second, if we consider the objective of the market share regulation, that is, restricting anti-competitive behaviors of the MSOs in the broadcasting programming distribution market by limiting their **sizes** with an *ex ante* regulation, then the size of a specific MSO should be measured by the number of its subscribers, not by the revenues or the number of operating broadcasting areas. It is just because, from the viewpoint of the PPs, the market power of a MSO is usually perceived by the number of its subscribers. Therefore, the current market share regulation in the pay TV market has a fundamental problem that the criterion of measuring market shares such as revenues or number of operating areas does not match with the objective of the regulation.

Last, a relevant market in the regulation is confined to only the cable TV service. However, let alone the audience market where the DBS provides closely substitutable services to the cable TV services, the DBS operator is also competing with the SOs in the broadcasting programming distribution market. Therefore, it is necessary to expand the boundary of the relevant market to the entire multi-channel pay TV services

including the DBS and IPTV.

3.2.2.2 Revision of current regulation

Based on the previous discussion, the basic directions of improving the current market share regulation in the pay TV market can be stipulated as follow: ① the relevant market is expanded to the entire multi-channel pay TV services; ② the criterion for measuring a market share is changed to the number of subscribers; ③ the upper limit of the market share of a specific service provider can be prescribed as 30~33 percent of total number of subscribers of the multi-channel pay TV services.

From an economic perspective, stipulating an upper limit on the market share of a specific service provider based on the number of its subscribers is to restrict a specific provider's market dominant power in the broadcasting programming distribution market. It is irrelevant to the market dominant power of the SOs in the audience market, considering that the audience market is separated into 77 operational areas and that the SOs already have market dominant power in their chartered areas. Also, defining a relevant market to include the cable TV, DBS, and IPTV implies that an upper limit on the horizontal merger among the SOs will become higher as the market shares of the DBS and IPTV increase. This means the upper limit on the horizontal merger among the

SOs will be automatically adjusted reflecting the intensiveness of competition in the pay TV market.

A merger case between two SOs in the same broadcasting area needs a special consideration. In principle, the decision of whether or not allowing the merger between those should be made comparing static efficiencies from price and quality competition between the two independent SOs with dynamic efficiencies from the economy of scale and investments for technology innovation expected to be realized with the merger of those. As already introduced, however, the empirical results from Lee & Lee (2005) and Rhee & Lee (2007) indicate that a merger between two SOs in the same area is highly likely to lead to the abuse of market dominant position by the merged MSO in the situation of no competitive pressure from the DBS or IPTV. Therefore, the decision of whether or not allowing a merger between two SOs in the same area will critically depend on the actual existence of competitive pressure from the alternative platform operators before everything else.

3.2.2.3 Countermeasures against anti-competitive behaviors of MSP and MSO

The alleviation of the market share regulation suggested in the previous subsection leads inevitably to the emergence of even bigger MSOs. When there does not exist any

considerable competitive pressure from the DBS or IPTV, emerging gigantic MSOs may impede fair distribution of broadcasting programmings by conducting anti-competitive behaviors. As mentioned before, the SOs are already enforcing implicitly OnMedia and CJ not to provide their popular programmings to the competing DBS operators, thereby creating content differentiation between the networks. This anti-competitive behavior may reappear against the IPTV and the emergence of huge MSOs through a mitigated market share regulation will provide them even stronger incentive and capability of participating in that anti-competitive behavior.

The major MSP, OnMedia and CJ are also conducting a different kind of anti-competitive behavior. Currently, they block competing PPs from accessing to their affiliated cable platforms, thereby creating network differentiation between their own programmings and the competing PPs' programmings. This network differentiation is apparent in the genre of movie and documentary, in particular. For example, as of 2004, only one cable platform out of 14 platforms affiliated to OnMedia and CJ broadcasted a competing movie channel, ABO, while it could be viewed from around a half of remaining 105 platforms as of 2004. At present, this kind of anti-competitive behavior may not be a serious problem since only 14 cable platforms are affiliated to the two major MSPs. But, it will become a serious problem if a PP producing a popular

programming vertically integrates a significant number of SOs through a mitigated market share regulation.

A fundamental solution on those kinds of anti-competitive behaviors creating content differentiation and network differentiation is to activate competition on the platform level. However, activating competition enough to remove those anti-competitive behaviors may require a long period of time. Furthermore, the anti-competitive behavior creating content differentiation may make it difficult to activate competition itself on the platform level. Therefore, it may be necessary to devise institutional measures to cope with those anti-competitive behaviors.

Content differentiation and Program Access Rule The current broadcasting law does not stipulate any clauses banning and punishing a refusal to trade or discriminatory behaviors intended to create content differentiation among competing networks or platforms. The clauses on unfair businesses and the abuse of market dominant position in the competition law do not appropriate to apply to the pay TV market, either, where even popular programmings have a market share less than ten percent.¹⁴

Therefore, it is necessary to clearly stipulate clauses regarding the refusal to trade and

¹⁴ If we define a relevant market of a specific programming by genre, we may apply the competition law to the refusal to trade or discriminatory behaviors in the broadcasting programming distribution market. However, setting criteria for defining the relevant markets by genre would be very controversial.

discriminatory behaviors intended to create the content differentiation in the broadcasting law. The ‘program access rule’ enacted in 1992 in the U.S. which prohibits MSPs and DBS operators from exclusively using their broadcasting programmings, would be a good reference.¹⁵ When introducing a regulation like the program access rule, it is important to clarify that the regulation will be implemented for a limited time. Different from the competition law, which is an *ex post* regulation for protecting existing competition, a regulation like the program access rule is an *ex ante* regulation of which purpose is create competition. This kind of *ex ante* regulation is likely to partly limit the freedom of contract, and therefore, we should check regularly of its justice. Hence, it is important to stipulate clearly a specific period in which the regulation is implemented, and after that period, the decision of whether or not renewing the regulation will be made based on an investigation on the competitiveness on the platform level.

Network differentiation and Commercial Leased Access Rule To cope with potential anti-competitive behaviors by MSPs creating network differentiation among competing PPs, it will be valuable to consider the introduction of a regulation like ‘commercial leased access rule’ enacted in 1984 in the U.S. The rule requires each SO with more

¹⁵ For a detailed suggestion for introducing a ‘program access rule’ into Korea, see Hong & Jung (2005)

than 36 channels to designate some part of channel capacity for lease in proportion to the size of available channel capacity and suggests the terms and conditions of leased channels, positioning of leased channels, and method of pricing leased channels. Besides of MSPs, MPPs or independent PPs are also able to create the network differentiation by asking a SO not to do business with their competing PPs in exchange for providing their popular programmings to the SO. This kind of anti-competitive behavior can also be dealt with a regulation like the commercial leased access rule.

3.2.3 Softening Bundling Regulation in the Telecommunication Market

As mentioned earlier, competition modes in the multi-channel pay TV market will be centered on the provision of TPS or QPS in the near future. However, KT, who is highly expected to be entering the market with the provision of the IPTV service, is actually prohibited from bundling telecommunication and broadcasting services by a regulation because it is a market dominant player in the local wireline phone service and broadband internet service market.¹⁶ On the contrary, a bundling of services by a SO can be done without any regulations. Therefore, the introduction of the IPTV service needs to be accompanied by a mitigation of the bundling regulation applied to KT in

¹⁶ Current regulation banning a bundling of telecommunication services by market dominant players in major telecommunication markets does not have any clauses regarding a bundling of telecommunication services and broadcasting services.

order to provide a level playing field for competing on the platform level. To mitigate the current bundling regulation, it may be necessary to enact a rule and provide detailed criteria for the bundling.

For instance, the rule may contain the following clauses considering possible anti-competitiveness of bundling activity. At first, ① any business practices enforcing customers to purchase a bundled product such as a pure bundling will be banned, and ② a bundling of monopolistically supplied telecommunication services with other services and goods will also be banned. But, even in a case of the above clause ②, a bundling may be allowed if 1) the bundling passes an imputation test and 2) a provider of the bundled services guarantees an equal and fair access to its monopolistically supplied services to other enterprises.¹⁷ This alleviation of the bundling regulation also makes it possible for KT to bundle its phone service, broadband internet service with broadcasting service by the DBS of which KT is the largest share holder. Therefore, by alleviating the bundling regulation, we can expect competitive pressure from the incumbent DBS, let alone the newly entering IPTV.

¹⁷ An essential element for guaranteeing an equal and fair access to a monopolistically provided service is the determination of reasonable usage fees, which may turn out to be very difficult technically. For this reason, someone argues that KT should be required to provide the IPTV service only through its subsidiary in order to block any possible transfer of its market power to the pay TV market. Addressing this issue is beyond the objectives of the paper and needs further empirical analysis.

4. Conclusion

This paper analyzed the market structure and competition environment of the free-to-air broadcasting market and multi-channel pay TV market and identified critical regulations causing the delayed competition in each market. Subsequently following this discussion, I evaluated those regulations from the perspectives of two policy objectives: 1) securing public interest of broadcasting; and 2) enhancing social welfare by encouraging competition. It showed that the current regulations responsible for the retarded competition in the broadcasting industry could not be justified even from the perspective of 'securing public interest of broadcasting'. Considering this evaluation result, it is necessary to abrogate or amend the current regulations and devise appropriate ways to introduce competition into the broadcasting industry. Hence, the paper suggested several policy directions to revitalize competition in the free-to-air broadcasting market and the pay TV market.

Regarding the free-to-air broadcasting market, at first, I have identified that the KOBACO system is the most influential regulation restricting the competition in the audience market and the outside production market, let alone the broadcast advertising market. Furthermore, I explained that several grounds of the system asserted based on

the public interest of broadcasting are not well founded empirically or theoretically, while the system results in a variety of inefficiencies. Based on the analysis, in order to dissolve the current KOBACO system and introduce competition into the free-to-air broadcast advertising market, I suggested an alternative plan composed of the following main contents: ① each free-to-air broadcaster should be allowed to choose a way to sell its advertising time. Then each free-to-air broadcaster can sell its advertising time by either organizing an internal sales department or setting up a subsidiary media representative, or through an independent media representative; ② advertising prices should not be determined by regulation, but by market demand and supply in the free-to-air broadcast advertising market; and ③ the KOBACO needs to continue to act as a media representative for KBS2 and EBS for the next two or three years, and after that, it is desirable to privatize the KOBACO.

When it comes to the multi-channel pay TV market, I showed that the restricted competition on the platform level is a critical factor hampering the growth of the entire pay TV market. I also explained that the policy objective of 'public interest of broadcasting' directly related to this delayed competition, that is, the 'realization of localism' is very likely to be unrealistic to pursue in the pay TV market. Then I suggested the policy recommendations to activate the competition on the platform level

as follow: ① to put competitive pressure on the incumbent monopolistic platform operators, the entry of an additional platform operator, the IPTV into the market should be allowed as early as possible by revising the current broadcasting law; ② in order to mitigate the opposition from existing platform operators to the introduction of the IPTV and to ease the entry of IPTV operators into the market, the current market share regulation applied to the platform operators should be alleviated; and ③ the current regulation which prohibits KT, a market dominant player in the telecommunications sector, from bundling telecommunication goods and services, needs to be softened to make a level playing field with the incumbent SOs.

Currently, considering a rapid progress in the convergence between the broadcasting and telecommunication industries, the Korean government is trying to reform regulatory bodies and legislative systems related to the two industries. It also has a plan to modify various regulation currently applied to those industries. Essential policy objectives in devising alternative regulatory and legislative systems and alternative regulation schemes will be to secure public interest of broadcasting and to enhance social welfare by activating competition. From this perspective, the following questions need to be addressed in the near future: ① whether, and if so, how much the public interest of broadcasting such as program diversity and plurality of voices in the media can be

guaranteed by the market competition in an environment where the number of channels are increasing significantly and the active role of audience in consuming broadcasting contents are gradually promoted by the expansion of bi-directionality of broadcasting;

② how the market mechanism can be utilized to promote the public interest of broadcasting; and ③ whether, and if so, how a variety of vertical constraints in the broadcasting industry should be coped with. Answering those questions is beyond the objectives of the paper, but is a prerequisite for devising alternative regulation schemes.

References

Averch, H. and L. Johnson (1962), Behavior of the Firm under Regulatory Constraints,

American Economic Review, 52

Hong, Daesik and Sungmoo Jung (2005), *Research on the Introduction of Program*

Access Rule, Broadcasting Commissions Project Report

Lee, Sang-Woo and Innchan Lee (2005), *Research on the Competition in the Multi-*

channel Pay Television Market, KISDI Research Monograph 05-10

Rhee, Hongjai and Sang-Woo Lee (2007), A Choice-Theoretic Approach to the Effect of

CATV Monopolization on Consumer Welfare: Korea's Empirical Case, Mimeo