1. Introduction and overview

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In the early stages of export-oriented industrialization, the Korean government shared the investment risks of private-sector firms. Implicit government protection encouraged firms to undertake aggressive investment under the logic of optimum-efficiency scales for international competitiveness. The government was reluctant to seek fundamental solutions to the problems of monopolization and collusion and instead opted to regulate the behavior of dominant firms to prevent "abuses."

This approach continued under the 1981 Monopoly Regulation and Fair Trade Act (MRFTA), but the ensuing liberalization was asymmetric. As market-entry restrictions and investment controls were relaxed, institutional reforms and credible market signals were not introduced to replace weakening government control. The conglomerates, confident that they were too big to fail, expanded aggressively through debt financing. The explosive combination of weakening government control and continuing expectations of government guarantees set the stage for Korea's economic crisis of 1997.

In the aftermath of the crisis, 16 large business groups failed. Firms reassessed investment risks and increasingly focused on building core competence. The problems inherent in the MRFTA were addressed through amendments and other changes in line with the increasing competition-advocacy role of the Fair Trade Commission. The 1999 Omnibus Cartel Repeal Act removed legal exemptions for 20 cartels under 18 statutes. In addition, the legal standard for anticompetitive practices was changed from substantial restraint to unreasonable restraint of competition, making it no longer possible to defend a restrictive agreement on the grounds that it has an insignificant actual effect.

During the past decade and a half there has been a marked shift in emphasis from industrial policy to competition policy, with increasing reliance on market mechanisms rather than "the rule of government officials." Yet many challenges remain. Many industries are still highly concentrated and, in a reversal of the recent trend, overall market concentration has increased since the mid-2000s. The Fair Trade Commission is still committed to its competition-advocacy role, but institutional legacies tend to impede progress on core competition issues. The commission should conduct rigorous market studies and adopt appropriate remedies to make markets work better for consumers. Policy on contentious issues should be based on sound economic theory and empirical analysis.

The book examines these issues. The chapters are authored by experts from Canada, Korea and the United States and provide international comparisons of market structures with particular reference to the impacts of foreign competition on market concentration. The book also examines core competition issues, including international experiences with abuses of dominance, mergers and collusion, and vertical restraints.

In Chapter 2, Jay Pil Choi discusses several issues that arise with "decentralized" enforcement of antitrust across jurisdictions due to the proliferation of independent antitrust authorities.

The author begins with recent developments in competition law and enforcement. Recent years have witnessed a dramatic increase in the number of countries introducing antitrust laws and creating antitrust agencies to enforce them (126 competition agencies from 111 jurisdictions, as of 26 April 2013). At the same time, the increasingly global nature of business transactions has resulted in a growing number of firms operating in multiple jurisdictions. In addition, antitrust authorities often take action against foreign firms if the firms affect competition in their jurisdictions. These developments, taken together, inevitably invite potential conflicts among competition authorities if their rules and procedures are not harmonized.

Choi provides an overview of potential pitfalls of antitrust proliferation with a focus on enforcement externalities. On the one hand, decentralized enforcement may lead to the "strictest regime wins" problem and the risk of over-regulation in the case of unilateral conduct by a dominant firm as the conduct needs to be cleared by each antitrust agency. On the other hand, the author adds that, if we consider enforcement costs, the enforcement externalities can also lead to a collective-decision dilemma and the concomitant free-rider problem in antitrust enforcement, which may lead to under-regulation.

From the perspective of business entities, independent and uncoordinated antitrust enforcement can be a considerable burden for multinational firms operating in many different countries if the antitrust rules differ and/or procedural rules of enforcement vary across countries. To make it worse, there may be countries that pursue additional or different objectives with antitrust policies, which would certainly create inconsistencies in the policy implementation. A nightmare scenario may be the case where different agencies require conflicting rules that cannot be satisfied simultaneously. Finally, the lack of uniform antitrust enforcement across jurisdictions raises the possibility of "forum shopping" in the presence of antitrust enforcement externalities. With multiple antitrust authorities in different jurisdictions, competitors of the merging parties or an allegedly dominant firm have incentives to bring the case to the antitrust authority with the most sympathetic ear, which ensures that the strictest antitrust rule is enforced in the global economy.

With this backdrop, the author moves on to consider specific enforcement areas in more detail. The areas in which enforcement externalities pose a serious problem and are discussed include mergers and acquisition, single-firm conduct by dominant firms and international cartels.

To address the potential downside associated with the proliferation of antitrust agencies and decentralized antitrust enforcement, Choi considers potential pathways to achieve policy harmonization across jurisdictions. In the pursuit of policy convergence through various channels such as the International Competition Network (ICN) and bilateral agreements between countries, the author proposes that the best way to achieve any commonality and harmonization is through movement towards effects-based antitrust enforcement guided by sophisticated economic reasoning rather than a formalistic approach. In practice, differences—cultural, political, legal and economic conditions—across countries can be a challenge in achieving harmonization of global antitrust enforcements. In this respect, effects-based antitrust enforcement with sound economic models and empirical foundations can mitigate the problem. The effects-based approach with the use of sound economic analysis can be applied across national boundaries with a common methodology. It enables antitrust agencies to find common ground and be insulated from political considerations and subjective beliefs, thereby promoting predictability and uniformity in antitrust enforcement.

In Chapter 3, William E. Kovacic examines different types of market studies—ranging from narrow analyses of single industries or parts of single industries to very broad work on competitive behavior or regulatory effects across sectors—and how they can be used to inform and design government policy.

The author points out that market studies serve three important functions for a competition agency. The first is to expand the base of knowledge on which an agency depends in order to understand commercial phenomena, to identify market failures and to devise forms of intervention that improve economic performance. The second is to facilitate the preparation of reports about competitive conditions within and across commercial sectors. The third is to enable the competition agency to engage in competition advocacy and to prepare recommendations for regulatory reform.

Good market studies require three principal inputs: (1) skilled human capital and (2) resources to collect and analyse information are self-explanatory; (3) political capital is less straightforward because market studies can arouse strong political opposition to the competition agency's recommendations. A competition agency must anticipate such opposition and may have to select cautiously among controversial issues that it can reasonably address at any given time. The more effective the study is in redressing substantial monopoly power, the greater the political hazards it can pose to the agency.

To confront these challenges, an agency must assemble a skilled research team, anticipate demands on resources (notably from legislative and executive branches of government), anticipate political risks (notably from the private sector and other interested parties) and devise strategies for effective implementation. For smaller, poorly funded, agencies, cooperation to pool research efforts can overcome resource limitations.

The author concludes that high-quality market analysis is a necessary ingredient for good policymaking, and the resources, manpower and time needed to produce good studies should not be underestimated. The author's examples of healthcare and the US Federal Trade Commission show how great the number and complexity of competition issues can be, even within a single industry, in any attempt to provide satisfactory answers to questions about interconnected markets within an industry.

In Chapter 4, Suil Lee identifies the importance of the foreign sector in investigating the degree of competition in the domestic market of Korea. For this purpose, Lee examines the import penetration and domestic market-concentration ratios by linking mining and manufacturing statistics and trade statistics. He then carries out empirical analyses on the relationship between the profitability of the domestic industry and the degree of import penetration.

The main results of the chapter can be summarized as follows. First, related to the import penetration, there has been a very big cross-industry difference in the level and variability of import penetration in the 2000s in Korea. There are also a number of industries in which the level of import penetration is very high or showing very severe volatility. This demonstrates the need for a new concentration-ratio index that reflects the actual degree of competition in the foreign sector. When the foreign sector was considered in the computation of the concentration ratio, Lee finds a number of industries where the decrease in the value of the index is very large or the annual volatility of the index changes significantly. These findings suggest that the impacts of the foreign sector need to be integrated into the process of assessing the competitiveness of domestic markets for open economies like Korea.

In addition, the empirical analysis on potential and actual competitive pressure from the foreign sector shows that potential competitive pressure, which is defined as a response of the import-penetration ratio to changes in an industry's profitability, operates with a one-year time lag in Korea. When it comes to actual competitive pressure, which is the negative impact of increasing import penetration on industry profitability, however, there was no empirical evidence on the existence of such pressure in Korea. Combining these findings on the potential and actual competitive pressures, Lee argues that it is possible to make an interpretation that imports increase in response to an increase in the profitability of the domestic industry but that importers who increase imports may try to enjoy a higher profit rate stringing along with domestic firms rather than fiercely competing with the domestic firms. This interpretation provides a policy implication that calls for the removal of entry barriers facing independent importers not affiliated with domestic producers.

In Chapter 5, Yong Hyeon Yang proposes a procedure to apply a "structured rule of reason" analysis for tying arrangements, which can be relied on by both the Korea Fair Trade Commission (KFTC) and the defendant in the investigation procedure.

Recently, a *per se* approach has been replaced by the rule of reason approach in many countries. In Korea, the Supreme Court ruled in 2007 that the KFTC has to prove anticompetitive effects of abusive behaviors of dominant firms. In Korea, abusive behaviors can be challenged under both Article 3-2 and Article 23 of the MRFTA. The only difference is that Article 23 can be applied to a larger set of firms as it concerns unfair trade practices, whereas an application of Article 3-2 requires market dominance because it prohibits abuse of dominance.

The author claims that behaviors of dominant firms should be condemned under the article on abuse of dominance (that is, Article 3-2) if the behaviors may harm competition only when engaged in by dominant firms. Tying arrangements are viewed as such an example.

The author further argues that the assessment of tying arrangements should be guided by a "structured rule of reason" approach that considers all the possible effects, negative or positive, in turn. The commission first has to prove anticompetitive effects, if any, of the behaviors using available data. He proposes the following four-step procedure.

First, identify tying and tied products. This involves market definition and, if necessary, a separate product test. Second, show the existence of market power or, more clearly, of market dominance. Third, find a theory of harm. This requires a decision on whether the tying arrangements have exploitative or exclusionary effects or both. Fourth and lastly, provide empirical evidence of the harm.

In response, the defendant firm should be given a chance to make counterarguments, which may consist of two distinct assertions. One is to disprove the arguments of the commission. The other defense is to claim that their behaviors enhance efficiency thereby canceling out the harm. The author concludes with a discussion of some practical issues in implementing the proposed rule.

In Chapter 6, Joseph Farrell, who has played a key role in the revision of the 2010 US *Horizontal Merger Guidelines* (HMG) as the director of the Bureau of Economics at the US Federal Trade Commission, comments on the role of merger guidelines and economic issues associated with recent revisions.

Farrell first explains the multiple purposes and multiple audiences that merger guidelines serve and provides a brief discussion of the intellectual and substantive history of merger guidelines. He then discusses some of the modern economic principles behind the 2010 revisions to the HMG in particular. He dispels the common misconception that the current guidelines abandon market definition and the use of market shares and concentration measures. Instead, he argues that the guidelines strike a sensible balance by respecting the traditional analysis based on market definition and concentration while, at the same time, incorporating modern economic analysis.

In his discussion of the unilateral effects of a merger, the author points out the sensitivity of merger-simulation analysis to functional forms for demand and cost, which can potentially limit the usefulness of merger simulation as a price predictor. Instead, he proposes two alternative approaches: measures of upward pricing pressure (UPP) and the illustrative price rise (IPR). UPP is essentially an idea to capture the changes in pricing incentives by the merging entities. It can be measured by the extent to which a unit sale by one of the merging firms cannibalizes sales by the merger partner and its profits, which were not taken into account before the merger. IPR simply assumes a "for instance" demand function and can be viewed as a simple illustration of how the UPP measure can be translated into price terms, rather than as a prediction of price.

Farrell also discusses how the 2010 guidelines incorporate coordinated effects with a broadened view of ordinary oligopoly conduct. Reactions by one oligopolist to another's competitive initiatives can reflect ordinary responses to a changed competitive environment, rather than an enforcement-oriented and perhaps prenegotiated discipline device in response to departures from an (implicit or explicit) agreement. This kind of Markov response is sometimes viewed as a coordinated effect and sometimes as a unilateral effect, but the chapter argues that such classifications are not important. In any case, this type of "parallel accommodating conduct" deserves discussion in the guidelines because otherwise there is a risk that merger analysis could improperly bifurcate into a static version of unilateral effects on the one hand and identifiable consciously coordinated (even if not necessarily illegally collusive) activity on the other hand. That would risk being misleading because a focus on the latter tends to encourage the analyst to look for conduct consisting of, or at least tantamount to, goal-oriented discussions or feelers along the lines of negotiation/deterrence, and to look for outcomes close to joint monopoly, while there is no reason to expect either in general.

The author concludes by lamenting the fact that the antitrust agencies' current practices do not fully exploit the learning opportunities from realized mergers. He thus advocates more systematic post-merger retrospective studies that would offer valuable lessons. Finally, he points out that guidelines are living documents that need to be subject to constant updating as we learn more about the effects of mergers with the accumulation of experience and new knowledge.

In Chapter 7, Robert C. Marshall, Leslie M. Marx and Claudio Mezzetti consider firms' strategies related to settlement negotiation and leniency applications once they are being prosecuted for collusion. When a firm is investigated for participation in a cartel, there is some flexibility for cartels to negotiate settlement with the government. Considering record-breaking fines and prison sentences for cartel firms and their employees in recent years, this *ex post* negotiation flexibility can have important implications for antitrust policy and deterrence of cartel formation, as settlement negotiations offer opportunities to reduce the penalties ultimately imposed on the colluding firms.

The authors consider two types of *ex post* negotiation. First, cartel members being prosecuted can negotiate settlement terms that favor them in terms of limiting future penalties from civil litigation. When there is a criminal finding of collusion, it often triggers follow-on civil litigation by consumers who were harmed. Cartel members can limit penalties from civil litigation in exchange for concessions to the competition authority, which may include the amount of criminal fines, the number of individuals receiving prison terms or the total length of prison terms. Second, leniency programs such as Amnesty Plus allow a multi-product firm being prosecuted for collusion in a market to qualify for reduced fines by applying for leniency in a separate product market in which it is also engaged in collusion.

The authors suggest that limited criminal pleas—for example in terms of plea length, customers affected or geography—can handicap the ability of civil litigants to pursue damages and hence reduce deterrence. Amnesty Plus can also have negative effects on detection and deterrence because it reduces the preemption effect. The reason is that a firm has less incentive to apply for leniency as it can obtain a similar fine reduction through Amnesty Plus in the event that any other member of the cartel applies for leniency.

The authors' analysis suggests that antitrust enforcement authorities should recognize potential negative effects of settlement negotiations as deterrence relies on civil as well as criminal penalties in addition to the potential for strategic abuse of leniency programs, especially the possibilities that arise when collusion in one product affects incentives for leniency applications in another product. Moreover, they recommend that enforcement agencies continue to adjust and enhance the tools available to them, including potentially such changes as encouraging whistleblowers for collusive conduct or expanding the opportunities and benefits for individual leniency applicants.

In Chapter 8, Ralph Winter reviews the economic foundations of competition policy towards vertical restraints with an emphasis on resale price maintenance (RPM). The author advocates competition policy guided by the basic economic principles and argues for the potential of still-greater movement in competition law on vertical restraints towards strong economic foundations. To this end, he first reviews the economic theory of the incentives for vertical restraints and discusses, against the background of this review, policy implications.

More specifically, he lays out two main economic principles for competition policy towards vertical restraints. First, agreements among firms in vertical relationships should be considered *prima facie* legal in the absence of any *horizontal* effects. A policy intervention on vertical agreements, regardless of their effect on intrabrand competition, would be justified only when they reduce interbrand competition by inducing collusive pricing or facilitate the exclusion of entry into upstream manufacturing by another brand or downstream retailing sector by discounters. Second, a manufacturer benefits from downstream competition. This implies that the manufacturer would impose vertical restraint only if it results in some other private benefits such as promotion of sales efforts. The manufacturer's incentives to trade off competition for sales effort in its decision to use vertical restraint may not be perfectly aligned with social incentives. However, this possibility alone cannot be a justification for intervention.

Winter points out that competition law in most jurisdictions fails to accord with the basic principles above. In particular, he lists six fallacies that plague current policy discussions and debunks them. First, a sensible policy would be to allow vertical restraints only when they are efficient. Second, in competition policy towards vertical restraints, the burden of proof should be on the side of the firm to demonstrate a legitimate business justification for the practice. Third, the likelihood of an anticompetitive use of a vertical restraint by a firm is always increasing with any increase in the market share or dominance of the firm. Fourth, a problem with RPM is the suppression of intrabrand competition, leading to higher prices. This effect can justify legal restrictions against the practice. Fifth, empirical evidence shows that the RPM practice generally increases price and reduces quantity and, therefore, reduces welfare. The evidence thus favors prohibition of the practice. The sixth and final fallacy comes from the laissez-faire side of the debate. It argues for *per se* legality of the practice and no need for a rule of reason approach because we already have laws against cartels.

In Chapter 9, Se Hoon Bang and Yangsoo Jin provide an analysis of the competitive effect of RPM in a market environment where multiple producers can offer RPM simultaneously and distributors have incentives to free-ride on each other's presale services.

The authors construct a simple theoretical model in which distributors provide product information via presale services. The information is useful to consumers because it helps consumers determine whether a product is the right match with his or her preference. This information may also be useful as a consumer can take advantage of it to evaluate the degree of match with another product. That is, the information is, to some extent, transferable across products, and therefore creates incentives for distributors to free-ride on competing distributors' presale services.

The transferability of the information across different vendors' products, of course, can vary depending upon the nature of products and market conditions. The effects of producers' RPM on the market outcome, in turn, will depend on the extent to which this type of information is transferable. If the information is non-transferable, for example, there is no free-rider problem in the provision of presale services by distributors. RPM thus is irrelevant to the provision of presale services. However, if the information is transferable, RPM can rectify the free-rider problem and restore incentives to provide presale services. In this case, the competitive effects of RPM depend on the degree of information transferability. For instance, if the information is not easily transferable across products, the main effects of presale information would be to increase product differentiation and hence soften producers' price competition. This may make consumers worse off in the end although they are served presale services that allow them to choose a right-match product.

By considering the interplay among multiple producers and multiple distributors, Band and Jin's analysis enhances our understanding of RPM's competitive effects and complements policy guidelines of competition authorities. In particular, the European Commission's "Guidelines on Vertical Restraints" emphasizes RPM's anticompetitiveness for a market situation with multiple producers, whereas it stresses procompetitiveness for a situation with distributors' free-rider problem. The analysis in this chapter shows that these two market conditions, if they exist at the same time, interact to determine RPM's competitive effects, being either procompetitive or anticompetitive. This implies that competition authorities should look into the market conditions more carefully when they assess individual RPM cases. The authors also suggest a few points that deserve to be considered in the assessment of RPM cases in practice.

In Chapter 10, Woohyun Chang reviews potential anticompetitive effects of so-called Specific Purchase Contracts widely used by Korean department stores as a mechanism to coordinate retail prices.

A specific purchase contract (SPC) is a legal form of agreement between a producer and a retailer in which the producer does not sell directly to the retailer, but merely rents the retail space and pays a sales fee proportional to the sales volume to the retailer (department store). As a result, the producer retains the property rights of the product until it is sold and can set the final consumer price, whereas the retailer effectively sets a part of the producer's costs. In Korea, it is observed that the price of a specific product is the same in all department stores nationwide, regardless of the location and the retail chain to which the store belongs. This price uniformity is enabled by the producer's ability to set the price through SPCs. The SPC price-coordination mechanism can be similar to other retail price coordination such as RPM in that it can facilitate collusion among firms. Chang develops a simple model with one producer and two retailers to analyse potential anticompetitive effects of SPCs. His analysis suggests that SPCs' anticompetitive effects can be more pernicious than other collusive mechanisms. The reason can be explained by externalities between retailers in setting their sales fee: each retailer does not take into account the other retailer's lost profit due to a higher retail price that would result from raising its own sales fee. As a result, the equilibrium retail price can be set even higher than the collusion price (which, in turn, is higher than the socially optimal retail price).

Chang's analysis offers the following lessons for researchers and policymakers. First, competition authorities should pay as much or greater attention to potential retail price coordination mechanisms other than RPM cases. Second, it is worth studying traditional business practices in depth as they can be used as disguised tools of anticompetition actions for firms. Finally, the SPC-based price coordination can be a valuable area of research, as this practice is widely used not only by department stores in Korea and Japan but also by rapidly growing department stores in China. It thus would have significant welfare implications to properly understand the potentially harmful effects of these types of contracts and business practices.