

**COE-RES Discussion Paper Series  
Center of Excellence Project  
The Normative Evaluation and Social Choice of  
Contemporary Economic Systems**

**Graduate School of Economics and Institute of Economic Research  
Hitotsubashi University**

COE/RES Discussion Paper Series, No.12

December 8, 2003

**Competition, Welfare, and Competition Policy**

Kotaro Suzumura

(Institute of Economic Research, Hitotsubashi University)

(Competition Policy Research Center, Fair Trade Commission of Japan)

Naka 2-1, Kunitachi, Tokyo 186-8603, Japan

Phone: +81-42-580-8350 Fax: +81-42-580-8351

URL: <http://wakame.econ.hit-u.ac.jp/~koho/1intro/COE/index.htm>

E-mail: [COE-RES@econ.hit-u.ac.jp](mailto:COE-RES@econ.hit-u.ac.jp)

# Competition, Welfare, and Competition Policy

Kotaro Suzumura\*

Institute of Economic Research, Hitotsubashi University

and

Competition Policy Research Center, Fair Trade Commission of Japan

November 20, 2003

## 1. Introduction

It is my great pleasure as well as honour to deliver this Keynote Speech at the International Symposium on Competition Policy organized by the Competition Policy Research Center (CPRC) in the Fair Trade Commission of Japan. The need for such a research center had been widely felt over the years. However, it was only in June of this year that the CPRC finally took off the ground. The timing of its birth was fortunate. The antimonopoly law and competition policy in Japan are currently under careful public scrutiny, and some parts of the law, as well as the procedures for its implementation, are in the process of careful redesign and deliberate social choice. It is hoped that the Center will function as an open public forum for economic as well as legal discussions on the role of competition policy in general, and the design and implementation of antimonopoly law in particular.

As an economist in charge of the CPRC, I would like to engage in the Confucian exercise of learning a lesson from the past in the controversial arena of welfare and competition in order to orient our future research on the theory of competition policy. In view of the rapid and drastic changes which are recently taking place in the global arena of competition, as well as the unprecedented progress in information technology which seems to be exerting a strong influence on the types and extents of sustainable competition, another maxim, to the effect that you can't put new wine in old bottles, may appear to be more appealing than the ancient Confucian maxim. Whether or not the accumulated wisdom in the past on welfare and competition may still be able to generate new revelation, or they cannot but fade out in the face of dazzlingly novel realities, can be determined only by the end of the day.

It was Harold Demsetz who began his lectures on economic, legal, and political dimensions of competition with the following thoughtful remark: "Competition occupies so important a position in economics that it is difficult to imagine economics as a social discipline without it.

Stripped of competition, economics would consist largely of the maximizing calculus of an isolated Robinson Crusoe economy. Few economists complete a major work without referring to competition, and the classical economists found in competition a source of regularity and scientific propositions [Demsetz (1982, p.1)].” Not many economists would dare to disagree with Demsetz on the central place he assigned to competition, yet there may remain a broad spectrum of disagreements among economists and, *a fortiori*, the public at large concerning the precise meaning of competition, the exact role competition plays as a decentralized resource allocation mechanism, and the social values attainable through the unconstrained working of competition. At one polar extreme of this broad spectrum lies the first conventional belief on the relationship between welfare and competition, which originates in Adam Smith’s invisible hand thesis. It is held by many, if not all, orthodox economists. At the other polar extreme of the spectrum lies the second conventional belief, which is widely held among the public at large, and the government officials in charge of industrial policies in particular. It regards competition as a kind of necessary evil to be kept under deliberate public control for it to be at all socially useful. Let us begin our discourse with these two conventional beliefs on welfare and competition.

## **2. Conventional Belief among Economists: Invisible Hand Thesis**

It was Adam Smith who praised the role of competition in Book 1, Chapter 2 of *The Wealth of Nations* by saying that producers as well as consumers, pursuing their own private incentives, are guided, as if by an *invisible hand*, to accomplish what is socially desirable in terms of the common good. Most, if not all, orthodox economists accepted Smith’s invisible hand thesis, and applauded competition as a decentralized mechanism for socially good allocation of resources. For modern economists in the late 20th century, however, Smith’s invisible hand thesis seemed to be too mythical to be left unvindicated. Thus, a modern vindication of Smith’s invisible hand thesis was established in the mathematically sophisticated form of the fundamental theorems of welfare economics: with perfectly competitive and universal markets and provided that some environmental conditions including the non-existence of externalities, increasing returns, and public goods are satisfied, those resource allocations attainable at competitive equilibria are Pareto efficient, whereas any Pareto efficient resource allocation can be attained through the appropriate redistribution of initial resources and the use of perfectly competitive market mechanism.

A strong criticism against this interpretation of Smith’s invisible hand thesis was raised by the Austrian school of economics, however, which is forcefully put forward by Friedrich von Hayek (1948, p.92) as follows:

It appears to be generally held that the so-called theory of “perfect competition” pro-

vides the appropriate model for judging the effectiveness of competition in real life and that, to the extent that real competition differs from that model, it is undesirable and even harmful.

For this attitude there seems to me to exist very little justification. ... [W]hat the theory of perfect competition discusses has little claim to be called "competition" at all and that its conclusions are of little use as guides to policy. The reason for this seems to me to be that this theory throughout assumes that state of affairs already to exist which, according to the truer view of the older theory, the process of competition tends to bring about (or to approximate) and that, if the state of affairs assumed by the theory of perfect competition ever existed, it would not only deprive of their scope all the activities which the verb "to compete" describes but would make them virtually impossible.

It is against this background that the following restatement of the conventional belief among orthodox economists on the welfare effect of increasing competition due to William Baumol (1982, p.2), one of the creators of the theory of contestable markets, is of particular relevance:

[T]he standard analysis [of industrial organization] leaves us with the impression that there is a rough continuum, in terms of desirability of industry performance, ranging from unregulated pure monopoly as the pessimal [sic] arrangement to perfect competition as the ideal, with relative efficiency in resource allocation increasing monotonically as the number of firms expands.

This restatement of the first conventional belief can be theoretically tested in terms of a standard model of oligopolistic competition, which will enable us to check the sustainability of this conventional belief widely held among orthodox economists. Before actually engaging in such an exercise, however, let us turn to the second and opposite conventional belief which is widely held by the public at large, and the government officials in charge of industrial policies in particular.

### **3. Conventional Belief among the Public at Large: Necessary Evil**

The enthusiasm among orthodox economists in support of the invisible hand thesis, or its modern vindication in the form of the fundamental theorems of welfare economics, does not seem to be widely shared by the public at large. This dissent seems to reflect itself in such expressions as "excessive competition" or "destructive competition." This expression sounds almost like a self-contradiction in terms to those who hold the first conventional belief. Nevertheless, it has been extensively used throughout Japan's modern economic history. Indeed, there is the second conventional belief, according to which a Confucian maxim to the effect that "to go beyond is as wrong as to fall short" applies above all to the use and value of competition as a resource allocation mechanism. An interesting testimony to the ubiquity of this belief is provided by Yukichi Fukuzawa, one of the most important and influential intellectuals at the dawn of modern Japan. He wrote vividly in his autobiography of his experience with an official in the Tokugawa Government before the Meiji Restoration of 1868 in these terms [Fukuzawa

(1899/1960, p.190)]:

I was reading Chambers's book on economics. When I spoke of the book to a certain high official in the treasury bureau one day, he became much interested and wanted me to show him the translation. ... I began translating it ... when I came upon the word "competition" for which there was no equivalent in Japanese, and I was obliged to use an invention of my own, *kyoso*, literally, "race-fight."

When the official saw my translation, he appeared much impressed. Then he said suddenly, "Here is the word, 'fight.' What does it mean? It is such an unpeaceful word."

"That is nothing new," I replied. "That is exactly what all Japanese merchants are doing. For instance, if one merchant begins to sell things cheap, his neighbor will try to sell them even cheaper. Or if one merchant improves his merchandise to attract more buyers, another will try to take the trade from him by offering goods of still better quality. Thus all merchants 'race and fight' and this is the way money values are fixed. This process is termed *kyoso* in the science of economics."

"I understand. But don't you think there is too much effort in Western affairs?"

"It isn't too much effort. It is the fundamentals of the world of commerce."

"Yes, perhaps," went on the official. "I understand the idea, but that word, 'fight' is not conducive to peace. I could not take the paper with that word to the chancellor."

It is obvious that the government official could understand the instrumental value of competition at least to some extent, but he could not dare to confer the sacred status of the economic principle for managing a nation to the unpeaceful idea of competition.

The second conventional belief on the use and value of competition as a resource allocation mechanism persisted ever since. Indeed, there are numerous instances in which references were made to such expression as excessive competition or destructive competition in the public writings on the management of Japan's market economy. Suffice it to quote just one example. During the rapid growth period of the 1960s, one of the major concerns of MITI (the Ministry of International Trade and Industry) was the avoidance of "excessive competition in investment" in some class of manufacturing industries. It was alleged that excessive competition in investment tends to develop in industries characterized by heavy overhead capital, homogeneous products, and oligopoly, typical examples thereof being iron and steel, petroleum refining, petrochemicals, certain other chemicals, cement, paper and pulp, and sugar refining.

It may deserve recollection that the dictionary meaning of "excessive," viz., "extreme," "unreasonable," and "too much," connote in common "overshooting one or the other 'optimal' or 'reasonable' standard." Thus, the logical coherence of the second conventional belief can be properly examined only if we specify "one or the other 'optimal' or 'reasonable' standard." Before doing this logical exercise in the next section, however, it may not be out of place to cite a thoughtful observation made by Ryutaro Komiya (1975, p.214) on the "excessive competition in investment" in the 1960s.

The "excessive competition in investment" in an industry appears to me to depend on the following three factors: (i) the products of the industry are homogeneous, not differentiated;

(ii) the size of productive capacity can be expressed readily by a single index such as monthly output in standard tons, daily refining capacity in barrels, number of spindles, etc; and (iii) such an index of productive capacity is used by the supervising *genkyoku* [viz. the government office having the primary responsibility for the industry in question] or by the industry association for administrative or allocative purposes. If, for example, import quotas for crude oil are allocated on the basis of refining capacity at a certain time, this encourages oil companies to expand their refining capacity beyond the limit justified by market conditions, in the hope of gaining both market shares and profits. That productive capacity has actually been used or referred to for administrative or allocative purposes in direct controls, administrative guidance, or cartelization, and the companies rightly or wrongly expect this to be repeated in the future, seems to be the real cause of the “excessive competition in investment.” In industries where products are differentiated or made to order, so that marketing efforts are the determining factor in gaining market shares, or where it is difficult to express the size of productive capacity because of a wide variety of products (e.g., pharmaceuticals, machine tools), excessive investment has rarely been observed.

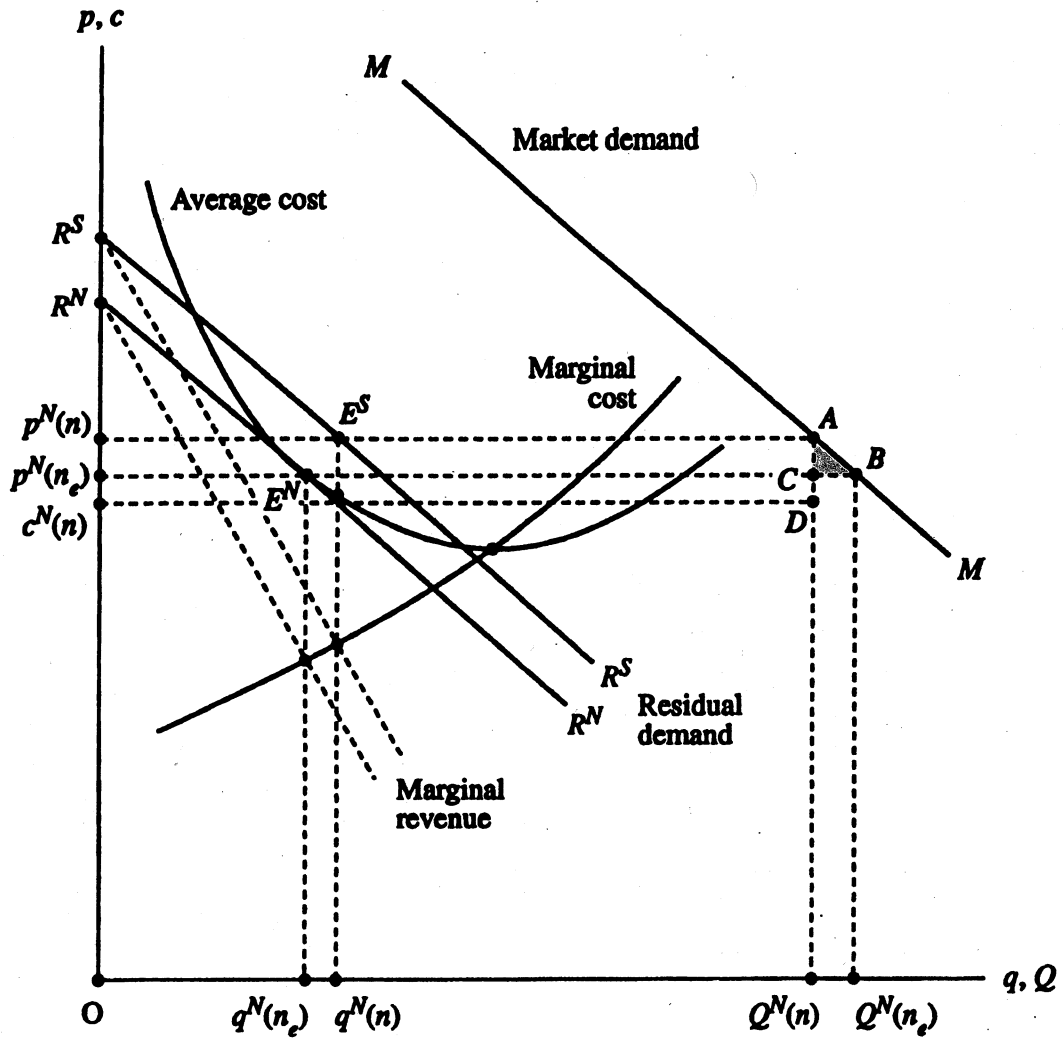
Thus, in Komiya’s perception, the “excessive competition in investment,” which is often cited as a reason why competition must be harnessed by deliberate public control, is in fact what triggered the “excessive competition in investment.” Whether or not this paradoxical explanation can also apply to other instances of excessive competition should be carefully checked, but Komiya’s observation seems to be rather widely supported by those who studied the Japanese experiences in the 1960s.

#### **4. Competition and Welfare: Can Competition Ever be Excessive?**

The first conventional belief on welfare and competition, which may be crystallized into “a widespread belief that increasing competition will increase welfare [Stiglitz (1981, p.184)],” goes squarely counter to the second conventional belief, according to which competition may turn out to be socially excessive and/or destructive. A natural question, then, suggests itself. Can competition ever be excessive in a wide class of economies? Paying due attention to Komiya’s empirical observation to the effect that the “excessive competition in investment” tends to develop in industries characterized by heavy overhead capital, homogeneous products, and oligopoly, consider an oligopolistic industry in which firms produce a single homogeneous product with large fixed cost. Suppose that the incumbent firms are currently earning higher-than-normal profits at the short-run Cournot-Nash equilibrium. If the first conventional belief, to the effect that “the relative efficiency in resource allocation increases monotonically as the number of firms expands,” is indeed correct, the profit-induced new entry of firms into this profitable industry must improve economic welfare. By carefully examining whether or not this conjecture is valid, we can check if competition can ever be excessive.

With this theoretical scenario in mind, consider **Figure I** which describes the long-run Cournot-Nash equilibrium among identical firms.  $MM$  is the market demand curve for this industry and  $R^NR^N$  is the residual demand curve for the individual firm. Individual firm’s out-

Figure I: Excess Entry Theorem at the Margin



put and industry output, both at the long-run Cournot-Nash equilibrium are denoted, respectively, by  $q^N(n_e)$  and  $Q^N(n_e)$ , where  $n_e$  denotes the number of firms in the long-run Cournot-Nash equilibrium. It is clear that  $Q^N(n_e) = n_e q^N(n_e)$ . To verify these facts, we have only to notice that the marginal cost curve crosses the marginal revenue curve, derived from the residual demand curve  $R^N R^N$ , at  $q^N(n_e)$  and profits at  $q^N(n_e)$  are exactly zero.

Suppose that the number of competing firms is lowered marginally from  $n_e$  to  $n$ . Since fewer firms are now sharing the same market demand curve, the residual demand curve for an individual firm must shift up to  $R^S R^S$ , so that the new Cournot-Nash equilibrium, denoted by  $q^N(n)$  and  $Q^N(n) := n q^N(n)$ , must satisfy  $q^N(n_e) < q^N(n)$  and  $Q^N(n_e) > Q^N(n)$ . It is clear that this decrease in the number of firms from  $n_e$  to  $n$  must exert two conflicting effects on welfare, which is measured in terms of the net market surplus, viz. the sum of consumer's surplus and the producer's surplus. The first is its effect on the allocative efficiency due to the concomitant decrease in consumer's surplus, which results from the increase in equilibrium price from  $p^N(n_e)$  to  $p^N(n)$ . In **Figure I**, this negative effect is measured by the area  $A p^N(n) p^N(n_e) B$ . The second is its effect on the production efficiency due to the further exploitation of residual scale economies, which results from the induced increase in individual equilibrium output from  $q^N(n_e)$  to  $q^N(n)$ . In **Figure I**, this positive effect is measured by the area  $A p^N(n) c^N(n) D$ . The net effect on social welfare is given by the difference between these two effects, viz., the area  $C p^N(n_e) c^N(n) D$  less the area  $ABC$ . Because the latter area must be a higher order infinitesimal than the former area, the net effect turns out to be positive, vindicating that a marginal decrease in the number of firms increases welfare. In other words, the long-run Cournot-Nash equilibrium number of firms,  $n_e$ , is socially excessive at the margin. Although this theorem is verified in this paper by means of a simple geometric device, a full analytical proof is available, e.g., in Kotaro Suzumura and Kazuharu Kiyono (1987), whereas several generalizations of the excess entry theorem are presented in Masahiro Okuno-Fujiwara and Kotaro Suzumura (1993), and Kotaro Suzumura (1995).

Contrary to the first conventional belief widely held among orthodox economists, we have thus demonstrated that there is a clear welfare-theoretic sense in which competition can be socially excessive. As a corollary to this proposition, we must be ready to admit in principle that the "regulation by enlightened, but not omnipotent, regulators could in principle achieve greater efficiency than deregulation [Panzer (1980, p.313)]." Note, however, that this observation, which is valid in itself, does not offhandedly justify that the second conventional belief should be supported in rejection of the first conventional belief. In other words, the excess entry theorem at the margin does not necessarily provide a rationalization of the actual interven-



tion by the down-to-earth regulators into the industrial organization of specific sectors. The reason for this verdict is worthwhile to spell out in some detail. In the first place, restricting competition to control excessive competition in the sense we have identified boils down to the protection of producer's benefits at the expense of consumer's benefits. Unless there is a clear social agreement that the producer's benefits should be given priority over the consumer's benefits, it seems hard to justify such a lopsided treatment between the two components of social welfare, viz., net social surplus. Nevertheless, there is a regrettable tendency towards the implementation of producer-oriented regulation for the reason which Vilfredo Pareto (1927, p.379) uncovered well ahead of his own time: "A protectionist measure provides large benefits to a small number of people, and causes a very great number of consumers a slight loss. This circumstance makes it easier to put a protectionist measure into practice."

Although the argument in support of the meaningful sense in which we can talk about the "social excessiveness of competition" is useful and revealing, we should be carefully on guard so as not to be exploited by those who have too much vested interest to leave matters to be determined by free and impersonal force of competition. The following acute warning by Avinash Dixit (1984, p.15) seems to be worthwhile to keep always in mind:

Vested interests want protection, and relaxation of antitrust activity, for their own selfish reasons. They will be eager to seize upon any theoretical arguments that advance such policies in the general interest. Distortion and misuse of the arguments is likely, and may result in the emergence of policies that cause aggregate welfare loss while providing private gains to powerful special groups.

To conclude this section on the possible excessiveness of competition from the welfare-theoretic viewpoint, let us remind ourselves that the validity of excess entry theorem as well as its various variants hinge squarely on the three basic assumptions: single homogeneous product, large fixed cost, and oligopolistic competition. If any one of these assumptions fails to be true, the excess entry theorem, or the variant thereof, is easily invalidated. For example, if the industry is producing a wide spectrum of differentiated commodities, the entry of a new firm, more often than not, accompanies a further widening of the product spectrum, which results in the expansion of the freedom of choice on the part of consumers. With the addition of this new channel through which firm entry can exert influence on social welfare, the excess entry theorem may well fail to apply to the industry in question. The important moral is that the theoretical verdicts on the welfare effects of competition hinge squarely on the specification of industry characteristics and types of competition, so that there exists no universally applicable conventional wisdom in this slippery arena of welfare and competition.

Thus, the general moral of our exploration on welfare and competition seems to be as follows. Just as "[d]emocracy is the worst form of government except all those other forms

that have been tried from time to time [Winston Churchill's speech in the House of Commons (November 1947)]," competition may be the worst form of economic mechanism except all those other forms that have been tried from time to time. We should add that the task of competition policy is precisely to make the functioning of this imperfect mechanism better than otherwise.

## **5. Consequential Value versus Procedural Value of Competition**

There is one more aspect of our theoretical analysis of excessive competition which is in fact quite insidious. As Kenneth Arrow (1987, p.124) once observed, "[e]conomic or any other social policy has consequences for the many and diverse individuals who make up the society or economy. It has been taken for granted in virtually all economic policy discussions since the time of Adam Smith, if not before, that alternative policies should be judged on the basis of their consequences for individuals." There is no way of denying that almost all, if not literally all, economists are consequentialist in the sense of Arrow, viz., they are ready to judge the goodness of economic mechanisms and/or economic policies on the informational basis of their consequences. As a matter of fact, their evaluative perspective is even narrower than *consequentialism* as such. This is because, more often than not, they are willing to judge the goodness of consequences of an economic mechanism and/or economic policy vis-à-vis another mechanism and/or policy exclusively in terms of the welfares which accrue to "the many and diverse individuals who make up the society or economy." As a matter of fact, *welfarist-consequentialism*, so-called, or *welfarism* for short, permeates through the mainstream of contemporary welfare economics and social choice theory. It is clear that the excess entry theorem in the previous section is no exception to this general observation.

Recent years have witnessed an upsurge of criticisms against welfarism by some of the leading moral and/or political philosophers such as John Rawls (1971) and Ronald Dworkin (2001), as well as the leading scholar in welfare economics and social choice theory such as Amartya Sen (1985; 1999). They commonly emphasized the importance of non-welfaristic features of consequences, or even the non-consequentialist features, of economic mechanisms and/or economic policy in their evaluative exercises. Those alternative viewpoints which are emphasized along with the welfaristic viewpoint include procedural fairness, richness of opportunities, responsibility and compensation, and liberty and rights. In our present context of welfare and competition, however, there is even more classic criticism against welfarism than these recent criticisms by moral and/or political philosophers and normative economists. It was in fact voiced by one of the most celebrated neoclassical economists, viz., John Richard Hicks (1981, pp.137-140):

Why is it ... that anti-monopoly legislation (and litigation) get so little help, as they evidently do, from the textbook [economic] theory? Surely the answer is that the main issues of principle --- security on the one hand, freedom and equity on the other, the issues that lawyers, and law-makers, can understand --- have got left right out. They cannot be adequately translated, even into terms of surpluses. ... To put the same point another way. The liberal, or non-interference, principles of the classical ... economics were not, in the first place, economic principles; they were an application to economics of principles that were thought to apply over a much wider field. ... As the nineteenth century wore on, the increasing specialization of economics led to an increasing emphasis on the economic argument. Then it was discovered --- it was rightly discovered --- that the economic case for non-interference is riddled with exceptions: exceptions which may well have become more important in fact in the course of technological progress, and which certainly became of greater importance as the demands which were made on the economic system, in the direction of stability as well as of growth, became more exacting. Accordingly, since the other side of the case which had at one time been the more important side, had been so largely forgotten, what had begun as an economic argument for non-interference became an economic argument for the opposite. I do not question that on its own assumptions that argument ... was very largely right.

What I do question is whether we are justified in forgetting, as completely as most of us have done, the other side of the argument. Not that I wish to regard that 'non-economic' side as overriding; all that I claim for it is a place, and a regular place. I do not suppose that if we gave it this due attention, we should find ourselves subscribing ... to all the liberal principles of a century ago. ... Neither side should give way to the other; but there is no reason why there should not be scope for marginal adjustments, in great things as well as small. ...

I have accordingly no intention, in abandoning Economic Welfarism, of falling into the 'fiat libertas, ruat caelum' which some latter-day liberals seem to see as the only alternative. What I do maintain is that the liberal goods are goods; that they are values which, however, must be weighed up against other values.

To illuminate the Hicksian proposal of non-welfaristic value of economic mechanism and/or economic policy in concrete terms, it may be worthwhile to cite a salient example of the non-welfaristic or procedural evaluation of the competitive resource allocation mechanism. It was Milton Friedman (1962, p.21) who emphasized the intrinsic value of competitive market mechanism as follows:

No one who buys bread knows whether the wheat from which it is made was grown by a Communist or a Republican, by a constitutionist or a Facist, or, for that matter, by a Negro or a white. This illustrates how an impersonal market separates economic activities from political views and protects men from being discriminated against in their economic activities for reasons that are irrelevant to their productivity --- whether these reasons are associated with their views or their color.

To bring this important point into clearer relief, Friedman (1962, pp.109-110) recapitulated it in more general terms as follows:

[A] free market separates economic efficiency from irrelevant characteristics. ... In consequence, the producer of wheat is in a position to use resources as effectively as he can, regardless of what the attitudes of the community may be toward the color, the religion, or other characteristics of the people he hires. Furthermore, ... there is an economic incentive in a free market to separate economic efficiency from other characteristics of the individual. A

businessman or an entrepreneur who expresses preferences in his business activities that are not related to productive efficiency is at a disadvantage compared to other individuals who do not. Such an individual is in effect imposing higher costs on himself than are other individuals who do not have such preferences. Hence, in a free market they will tend to drive him out.

It may deserve emphasis that Friedman's argument in favor of competitive market mechanism is non-welfaristic in nature, as his praise for it is based on the procedural fairness it confers to the market participants. However, this is not to deny the fact that his argument does not neglect consequences altogether, as he also invokes the fact that those producers who discriminate individuals for any reason other than their productivities would have to face dire consequences.

A general moral seems to be the following. In evaluating the social value of competition, and in designing and implementing competition policy in search for the better functioning of competitive market mechanism, we should pay due attention to procedural considerations as well as to consequential considerations. People seem prepared to accept this extended viewpoint and make regularly the following type of reasoning. Let  $x$  and  $y$  be the consequences of economic mechanisms  $m^1$  and  $m^2$ , respectively. According to Mr. A's judgements, having  $x$  through  $m^1$  is better than having  $y$  through  $m^2$ , but Ms. B may judge otherwise. Indeed, one is making such judgements when one says that it is better to obtain whatever commodity bundle which the free market enables one to choose than to be assigned another commodity bundle by the central planning board, even when the latter bundle contains more of all commodities than the former. One is also making such judgements when one asks for more bread, more wine and more whatnot, irrespective of how these commodities are made available to him. In the former case, the resource allocation mechanisms have clear lexicographic priority over the consequences emerging from these mechanisms, whereas, in the latter case, the consequences are given lexicographic priority over the mechanisms. Although such extreme lexicographic judgements are not at all inconceivable, it is presumably more realistic to think that people care not only about the intrinsic values of resource allocation mechanisms, but also about their instrumental values in bringing about desirable consequences, and they are prepared to strike a balance between these two rival considerations. This point should not be forgotten in the design, implementation, and evaluation of competition policies.

## **6. Boundary between Private Sphere and Public Sphere**

Let us proceed from the analysis of competition to the analysis of competition policy. According to our perception, the economic analysis of competition policy should consist of the following three parts: (1) Drawing the boundary line between the private sphere and the public sphere; (2) Designing and implementing the fair market game; and (3) Coordinating domestic market games in the globalized world economy through the design and implementation of an

interface mechanism. In the following two sections, let us list some of the basic agendas for the economic analysis of competition policy along this scenario.

How to distinguish the private sphere, over which private agents should be basically free to compete with each other for the promotion of their own private objectives, from the public sphere, over which the government authority is within its jurisdiction to take public actions by itself, or regulate the actions of private agents in accordance with the socially agreed public objectives, is a deep and old issue; it can be traced back at least to John Locke and John Stuart Mill in England, and Benjamin Constant and Alexis de Tocqueville in France. Although the recognition that “a frontier must be drawn between the area of private life and that of public authority [Berlin (1969, p.124)]” is certainly not new, many attempts to provide a principle for drawing a frontier to this effect proved to be rather futile. Such an attempt goes all the way back to Mill’s *On Liberty* [Mill (1859/1977, p.276)], where he posed this issue in his idiosyncratic manner: “What ... is the rightful limit to the sovereignty of the individual over himself? Where does the authority of society begin? How much of human life should be assigned to individuality, and how much to society?” Mill’s own answer to this crucial problem was a famous, but deceptively simple, principle: “Each will receive its proper share, if each has that which more particularly concerns it. To individuality should belong the part of life in which it is chiefly the individual that is interested; to society, the part which chiefly interests society.” Unfortunately, Mill’s “simple principle” to this effect seems to have posed more problems than it settled, as “[m]en are largely interdependent, and no man’s activity is so completely private as never to obstruct the lives of others in any way. ‘Freedom for the pike is death for the minnows’; the liberty of some must depend on the restraint of others [Berlin (1969, p.124)].” These difficulties become all the more serious when our focus is shifted to the freedom of competition for private enterprises. It is no wonder that the design and implementation of the fair game of competition have been the subject of harsh dispute.

Suppose, for the sake of argument, that a proper boundary line between the private sphere and the public sphere could be somehow drawn. Even then, it does not follow that the government authority in charge of competition policy could relax and be indifferent to what private agents --- individuals and private enterprises --- would do within their respective private spheres for at least two reasons.

In the first place, the government authority has the major task of designing the fair market game, which private agents are entitled to participate and play on their own initiatives, and seeing to it that all the participants faithfully observe their obligation of fair play. If there are infringements on the obligation of fair play, the government authority in charge of competition policy should rectify this divergence from the proper play of the game. It is to cope with this major task efficiently and effectively that the competition policy authority must legislate the

competition laws, monitor the performance of market participants and, if need be, enforce the fair play of the competitive market game.

In the second place, drawing the boundary line between the private sphere and the public sphere, as well as the design of the fair market game, cannot be done once and for all. Quite to the contrary, depending on the state of technology, the boundary between the private sphere and the public sphere, as well as the structure of fair market game, must be subject to incessant review, and constant effort must be made for further improvement on the mechanism design for the promotion of public welfare. To lend concreteness to what we are discussing, let us cite a couple of examples.

(1) There are many cases of regulatory reforms in Japan and elsewhere, which transformed the traditional state monopoly of, say, telecommunications industry by a public corporation into the mixture of liberalized competitive segments, where one of the competitors is the privatized ex-public corporation, on the one hand, and regulated segments with residual natural monopoly elements, on the other. With the further development of technology, however, even the regulated segments with residual natural monopoly factors had to be subject to gradual transfer to the competitive segments. The design and implementation of the fair market game must also adjust themselves to the need of this gradual process of regulatory reforms.

(2) Friedman's emphasis on the procedural fairness of competitive market mechanism may be under serious threat by the rapidly developing devices of electric money. It should be recalled that the Friedmanian protection of individuals from being discriminated against for reasons unrelated to their productivities is closely connected with the so-called "anonymity of money"; it is because no one can be traced back after the completion of market exchange of commodities and/or services for money that individuals are warranted to be free from being discriminated against in the competitive market mechanism. Electric money, which is expected to be effective against such unlawful acts as money laundering and fraudulent product quality, may undermine one of the important procedural merits of the competitive market mechanism. In order to maintain the procedural fairness of the competitive market mechanism in the face of otherwise beneficial technological development, those who are in charge of designing and implementing the fair market game may have to confront a totally different ball game.

Thus, the story of competition policy is not like a fairy tale in which prince and princesses marry, and then live happily forever; it is more like *Alice's Through the Looking-Glass* [Lewis Carroll (1939, p.152)], where "it takes all the running *you* can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

## **7. Interface Mechanism among Domestic Competition Policies**

An important fact about competition policy is that there are not many countries which have competition laws rooted deeply in the spontaneous evolution of domestic rules and con-

ventions. In the case of Japan, which has the second longest history in the world and next only to the USA in this arena, for example, the original antimonopoly law was transplanted from the American soil during the post World War II occupation period as an integral part of the economic democratization of Japan. It is true that several rounds of revisions, which took place after the end of the occupation period in 1952, were intended to strike a balance between the rules transplanted from the American soil and the indigenous sense of “fair” competition. Nevertheless, it remains to be the case that the formal contents of Japan’s antimonopoly law is not that different from the American prototype law and, for that matter, the EU model. The difference, if any, lies mostly in the administrative methods of implementation. There are room as well as reason for talking about harmonization of domestic competition policies in this arena.

Recollect that international harmonization of domestic rules --- including domestic competition laws and policies --- requires that the domestic rules of the game prevailing in the country A must be in basic harmony with those prevailing in the country B. Certainly, it has no root in the two basic principles of the GATT/WTO regime, viz. the *principle of most favored nation treatment* and the *principle of national treatment*. The former principle requires the member countries to accord the most favorable tariff and regulatory treatment, given to the product of any one of the trading partners, to all other member countries at the time of import or export of like products; the latter principle requires the member countries not to accord any discriminatory treatment between imports and like domestic products. As far as the same domestic rules are applied indiscriminately by each member country to domestic and foreign agents, and to domestic and foreign products, there is no infringement on the two basic principles of the GATT/WTO regime. Why, then, don’t we retain the domestic rules of the game, and leave matters to be settled by international competition among alternative economic mechanisms? What is wrong with this mutual recognition approach? This question is worth asking, as it seems to be rooted in the classical dictum: “When in Rome, do as the Romans do.”

The answer seems to depend crucially on the type of harmonization we choose for examination. It is certainly irrational and unreasonable to require the convergence of domestic rules of other countries to those domestic rules prevailing in the hegemonic country. However, this seems to be more a straw man model of harmonization, whose sole function is to be ridiculed and shot down, than a real model to be seriously discussed. More sensible approach to harmonization is to coordinate domestic rules of the member countries by means of a cleverly designed and implemented interface mechanism, which allows idiosyncratic domestic rules to function side by side harmoniously. Just as computers of the different make can collaborate harmoniously if only they are coordinated by an appropriate interface mechanism, the domestic rules of different countries can collaborate at least in principle.

This may be easier said than done, but there seems to be essentially no real alternative to this piecemeal approach to international harmonization with a deliberately designed and

collectively adopted interface mechanism.

## 8. Concluding Remarks

Instead of summarizing the whole contents of this paper, let us conclude with a brief recapitulation of its main messages.

(1) There are two conventional beliefs concerning the relationship between social welfare and market competition. According to the first conventional belief, the more competition will there be, the better will be the welfare performance of market competition. According to the second conventional belief, the Confucian maxim to the effect that “to go beyond is as wrong as to fall short” applies to the welfare effect of market competition too. We have argued that either one of these two conventional beliefs, widely though they are respectively held, may turn out to be wrong upon careful scrutiny, depending on the type of market competition and the conditions under which the industry is operated. The design and implementation of competition policy should pay due attention to this subtle relationship which holds between social welfare and market competition.

(2) Even when it is theoretically verifiable that “[r]egulation by enlightened, but not omnipotent, regulators could in principle achieve greater efficiency than deregulation,” this does not in itself justify the intervention by the down-to-earth government. The social cost of regulation should be carefully gauged and weighed against the social benefit of regulation. In doing so, it is also of crucial importance to pay due attention to the distributional implications of regulation.

(3) In evaluating the social performance of regulation versus competition, we should pay due attention not only to the welfaristic effects and/or the non-welfaristic effects on consequences, but also to the non-consequentialist effects thereof as exemplified by the procedural fairness of regulation versus market competition, the richness of opportunities thereby opened, and the liberty and rights of individuals and private enterprises under these social contrivances.

(4) The main functions of competition policy consists of (i) drawing the separating line between the private sphere and the public sphere, (ii) designing and implementing the fair market game, and (iii) coordinating the domestic market games through the clever design and implementation of interface mechanisms. Although harsh disputes occurred on the international harmonization of domestic rules and conventions, the shift of focus from the unrealistic convergence of domestic rules of many countries to those rules prevailing in the hegemonic country to the coordination of domestic rules by means of a cleverly designed interface mechanism, thereby allowing idiosyncratic domestic rules to function together harmoniously, seems to be not only workable but also sensible.

There are already many dishes on the table. Still more I am sure are going to be served in this international symposium. I am looking forward to enjoying this exceptionally rich feast.



## **Acknowledgement**

\* Text of the Keynote Speech delivered at the International Symposium on Competition Policy, November 20, 2003, which was organized by the Competition Policy Research Center in the Fair Trade Commission of Japan. Thanks are due to Professors Kenneth Arrow, Timothy Besley, Akira Goto, Kazunori Ishiguro, Motoshige Itoh, Ryutaro Komiyama, Masahiro Okuno-Fujiwara, Amartya Sen, and John Vickers, with whom I had several discussions on the topics related to this paper. Needless to say, they should not be held responsible for any opinion expressed in this paper.

## References

- Arrow, K. J. (1987): "Arrow's Theorem", in Eatwell, J., Milgate, M. and P. Newman, eds., *The New Palgrave: A Dictionary of Economics*, Vol.1, London: Macmillan, pp.124-126.
- Baumol, W. J. (1982): "Contestable Markets: An Uprising in the Theory of Industrial Structure," *American Economic Review*, Vol.72, pp.1-15.
- Berlin, I. (1969): *Four Essays on Liberty*, Oxford: Clarendon Press.
- Carroll, L. (1939): *The Complete Works of Lewis Carroll*, London: The Nonesuch Press.
- Demsetz, H. (1982): *Economic, Legal, and Political Dimensions of Competition*, Amsterdam: North-Holland.
- Dixit, A. (1984): "International Trade Policy for Oligopolistic Industries," Supplement to *Economic Journal*, Vol.94, pp.1-16.
- Dworkin, R. (2000): *Sovereign Virtue: The Theory and Practice of Equality*, Cambridge, Mass.: Harvard University Press.
- Friedman, M. (1962): *Capitalism and Freedom*, Chicago: The University of Chicago Press.
- Fukuzawa, Y. (1960): *The Autobiography of Fukuzawa Yukichi*, translated by E. Kiyooka with an Introduction by S. Koizumi, Tokyo: The Hokuseido Press.
- Hayek, F. A. (1948): "The Meaning of Competition," in his *Individualism and Economic Order*, Chicago: The University of Chicago Press, pp.92-106.
- Hayek, F. A. (1978): "Competition as a Discovery Procedure," in his *New Studies in Philosophy, Politics, Economics and the History of Ideas*, London: Routledge & Kegan Paul, pp.179-190.
- Hayek, F. A. (1973): *Rules and Order*, Vol.1 of *Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy*, Chicago: University of Chicago Press.
- Hicks, J. R. (1981): "A Manifest," in his *Wealth and Welfare*, Vol.I of *Collected Essays on Economic Theory*, Oxford: Basil Blackwell, pp.135-141.
- Itoh, M., Kiyono, K., Okuno-Fujiwara, M. and K. Suzumura, (1991): *The Economic Theory of Industrial Policy*, San Diego: Academic Press.
- Komiya, R. (1975): "Planning in Japan," in Bornstein, M., ed., *Economic Planning: East and West*, Cambridge: Ballinger, pp.189-227.
- Mankiw, N. G. and M. D. Whinston (1986): "Free Entry and Social Inefficiency," *Rand Journal of Economics*, Vol.17, pp.48-58.
- McNulty, P. J. (1968): "Economic Theory and the Meaning of Competition," *Quarterly Journal of Economics*, Vol.82, pp.639-656.

- Mill, J. S. (1859/1977): *On Liberty*, London: Parker. Reprinted in: *The Collected Works of John Stuart Mill, Vol.XVIII*, ed. by J. M. Robson, Toronto: University of Toronto Press.
- Okuno-Fujiwara, M. and K. Suzumura (1993): "Symmetric Cournot Oligopoly and Economic Welfare: A Synthesis," *Economic Theory*, Vol.3, pp.43-59.
- Panzer, J. C. (1980): "Regulation, Deregulation and Economic Efficiency: The Case of CAB," *American Economic Review: Papers and Proceedings*, Vol.70, pp.311-315.
- Pareto, V. (1927): *Manual of Political Economy*, New York: A. M. Kelley.
- Pigou, A. C. (1920): *The Economics of Welfare*, London: Macmillan.
- Rawls, J. (1971): *A Theory of Justice*, Cambridge, Massachusetts: Harvard University Press.
- Robbins, L. (1932/1935): *An Essay on the Nature and Significance of Economic Science*, London: Macmillan, 1st ed., 1932; 2nd ed., 1935.
- Sen, A. K. (1985): *Commodities and Capabilities*, Amsterdam: North-Holland.
- Sen, A. K. (1999): *Development as Freedom*, New York: Alfred A. Knopf.
- Stigler, G. J. (1957): "Perfect Competition, Historically Contemplated," *Journal of Political Economy*, Vol.65, pp.1-17.
- Stiglitz, J. E. (1981): "Potential Competition May Reduce Welfare," *American Economic Review: Papers and Proceedings*, Vol.71, pp.184-189.
- Stiglitz, J. E. (1992): "The Meanings of Competition in Economic Analysis," *Rivista internazionale di Scienze sociali*, Vol.2, pp.191-212.
- Suzumura, K. (1995): *Competition, Commitment, and Welfare*, Oxford: Clarendon Press.
- Suzumura, K. (1997): "Industrial Policy in Developing Market Economies," in Malinvaud, E., Milleron, J.-C., Sen, A. K., Sengupta, A., Stern, N., Stiglitz, J. E. and K. Suzumura, *Development Strategy and Management of Market Economy*, Vol.I, Oxford: Clarendon Press, pp.175-221.
- Suzumura, K. (2000a): "Welfare Economics Beyond Welfarist-Consequentialism," *Japanese Economic Review*, Vol.51, pp.1-32.
- Suzumura, K. (2000b): "On the Rule-Oriented Approach to Fair Trade," *Journal of Japanese Trade and Industry*, July/August 2000, pp.26-29.
- Suzumura, K. (2003): "Welfarism, Individual Rights, and Procedural Fairness," forthcoming in Arrow, K. J., Sen, A. K. and K. Suzumura, eds., *Handbook of Social Choice and Welfare*, Vol.II, Amsterdam: North-Holland.
- Suzumura, K. and K. Kiyono (1987): "Entry Barriers and Economic Welfare," *Review of Economic Studies*, Vol.54, pp.157-167.