"Ex-post Evaluation of Competitive Pressure from Imports in the Review of Business Combination" (Abstract)

In this report, we conducted ex-post evaluation of past business combination review cases which took the existence of competitive pressure from imports or from neighboring markets into consideration, and we also researched the situation in the U.S. and Europe regarding import pressure analysis techniques. Ex-post evaluation yielded results that were largely in line with the review results that JFTC issued at the time although some lingering issues related to techniques and data remained. Given the efforts to enhance economic analysis in JFTC's business combination reviews made in recent years, we propose the following three points as future challenges, with a mind to strengthen the interaction between practice and research: (1) refinement of analysis techniques, (2) enhancement of data collection and (3) securing of human resources and information disclosure for the refinement of analysis techniques.

- 1. Ex-post evaluation of competitive pressure from imports using economic analysis
 - We took up the case of the merger of Furukawa-Sky Aluminum Corporation and Sumitomo Light Metal Industries, Ltd. (the product we examined was pure copper tubes) and conducted ex-post evaluation using the following three analysis techniques.
 - (1) Analysis of correlation between domestic prices and import prices: Analysis showed that even though the difference in price between the examined products (focusing solely on prices after the merger) and imports narrowed, the cause of a fall in the correlation coefficient was not clear, and it was difficult to confirm that there was competitive pressure from imports to an extent that could be considered as statistically significant.
 - (2) Evaluation of mark-up rate based on estimated demand function: The analysis showed that, for the estimated demand function, the variance in price estimates was large, and it was, therefore, difficult to confirm that there was competitive pressure from imports to an extent that could be considered as statistically significant.
 - (3) Merger simulation (applying (2)): The analysis results suggested the existence of competitive pressure from imports (i.e. if domestic prices were raised, imports would have increased).
- 2. Ex-post evaluation of competitive pressure from neighboring markets using economic analysis
 - With respect to competitive pressure from neighboring markets, we took up the case of the capital tie-up between the Kirin Group and the Kyowa Hakko Group (the products we examined were sake type/mirin (sweet sake) type fermented seasonings), and conducted ex-post evaluation using the following three analysis techniques.
 - (1) The analysis of correlation between the examined product prices and rival prices (sake, hon-mirin, etc.): The analysis did not yield results that would allow us to confirm that there was competitive pressure from neighboring markets because the high

- correlation coefficient between these two prices might be caused by the effect of raw materials price which was common to both the examined products and rival items.
- (2) Own price elasticity: The analysis showed that when own price elasticity was calculated for each of the product category and compared, rival items had larger own price elasticity (absolute value), and that although the prices trended down after the merger, the absolute value of own price elasticity became larger.
- (3) Critical loss analysis (applying (2)): The analysis showed that the markets for rival items except (cooking) sake and the examined products were competitive and became particularly competitive after the merger. However, we could not confirm that there was competitive pressure from neighboring markets.

3. Import pressure analysis techniques

- Few guidelines in foreign countries explicitly mention import pressure analysis techniques (judgment standards) and, even if we look at cases of business combinations in the US and Europe, it cannot be said that there is a consensus on the best technique or standard.
- It is desirable to utilize import pressure analysis techniques in practice and thereby brush up details with respect to the approach to actual usage of each technique and the scope of the data (economic evidence) necessary to use such techniques properly (for example, in addition to the prices of the examined products and the prices of imports, questionnaire surveys on the difference in price and quality compared with imports, the spare production capacity of foreign companies based on published materials (magazines, etc.) and materials submitted by the companies involved).
- It is important to conduct analyses that take past events into consideration, adopting a wider time span, in order to increase more valuable economic evidence.

4. Suggestions for Japanese business combination reviews

- This joint research yielded results that are largely in line with review results that JFTC issued at the time, although there are lingering issues related to techniques and data. We should be careful about generalizing these results regarding the cases taken up in this joint research to other cases.
- Ex-post evaluation of business combinations is a research area in which knowledge appears to gradually accumulate in the US and Europe as well. Further accumulation of knowledge about ex-post evaluation is worthwhile in the sense of seeking valuable interaction between practice and research.
- Through the literature research in foreign countries, the following three areas are to be worth examining in the future in relation to business combination review practice in Japan.

(1) Refinement of analysis techniques

The accumulation of ex-post evaluation of business combinations is worthwhile for seeking refinement of ex-post evaluation techniques. The performance of analysis that takes past cases into consideration could also lead to more appropriate judgments in practice.

(2) Enhancement of data collection

Given that the data required for assessment is likely to vary depending on the individual business combination, it is difficult to determine the scope of data to be submitted by the parties to the combination in advance. Considering that data submission can be a huge burden for the parties involved, it is desirable to build a system that would enable data to be gathered by a standardized procedure.

(3) Securing of human resources and the way of information disclosure for the refinement of analysis techniques

The collection and analysis of economic evidence requires considerable manpower and adequate human resources with analysis skills above a certain level. However, it is difficult to nurture such human resources within a single organization, and constructive cooperation among authorities, industry and academia is essential. Creating a system whereby details of analysis conducted in practice and the analysis process can be shared among industry and academia is necessary for establishing a sustainable cycle of human resources development.