

An Event Study of Ex-Post Evaluations of Merger Decision Study

Abstracts

Keywords: ex-post evaluations of merger decisions, event study, evaluation methods, horizontal merger

In this project, we focus on the method used to assess “ex-post evaluations of merger decisions” that have been intensively studied in recent years by authorities in United States, European countries, and Japan. We describe the application of the method with illustrative examples from academic papers; we collect and describe the relevant literature, and apply the method to the domestic case. Based on our analysis we make suggestions to the Fair Trade Commission for future and further research.

The appropriate method used to execute the ex post analysis is usually chosen based on the availability of data. The choices include event studies, surveys, evaluation methods, and structural modeling. In this project, we describe the data requirements; outline the model which is estimated and its limitations in application. Furthermore, we choose a published academic paper for each method as an illustrative example and provide a detailed description of how the research was implemented, what difficulties may be encountered, and how they can be solved.

In the literature review we collect 38 total academic papers based on the method of ex post analysis. We summarize their findings and find that the number of existing publications is quite small relative to the number of industries. Furthermore, most cases selected for research are of anti-competitive concerns, and thus there is a lack of representation of merger cases. Therefore, in this project, we are not able to derive general conclusions about how market equilibrium changes after a

merger.

To implement the ex post evaluation method in the case of domestic markets, we collect data on daily stock prices and quarterly income of each publicly traded company from the Taiwan Economic Journal. To appropriately apply the event study and evaluation methods, we employ a set of criteria for inclusion: data availability, whether the case can be categorized as a horizontal merger, the merger decision outcome, and length of the data. We narrow it down to seven cases for event studies, and three cases for studies using the evaluation method. From the estimation results we find that if supplemented with the identities of competitors of merging firms, and the timing of intention of merger disclosure, the data from TEJ allow us to evaluate the ex post market equilibrium change with the Event Studies. However, since the data required for implementing the evaluation method are more demanding, although this approach can provide a more reliable estimation of ex post market equilibrium change, the evaluation method is not a methodology that can be supported with currently available public data.

As the literature on ex post evaluation of merger is too thin compared to the number of industries, and the cases analyzed in the literature are mostly of anti-competitive concerns which are not representative of mergers as a whole, we are not able to draw general implications regarding the effect of post-merger equilibrium of specific industries. Therefore, the suggestions we provide are mainly focused on possible methods that should be adopted and what data should be collected for future research. In this project, we find the post-merger market equilibrium estimated with the evaluation method is more reliable than other methods, and thus should be prioritized if the data are available. Furthermore, as the TEJ data only contain publicly traded companies, which implies the research based on these companies may not be representative, analysis of data similar to Industry, Commerce and Service Census should be adopted to obtain more general conclusions. In addition, well-executed research based on event studies and the

evaluation method requires appropriate choice of competitors of merging firms and a valid control group. If the survey can be implemented during the research process, which consults the relevant industrial experts about the information regarding competitors and the control group, the quality of the ex post evaluation of the merger should be greatly enhanced.