Analyzes Theories and Applications of Economic Methods for the Issues in Competition Law

ABSTRACT

Keywords: economic quantitative analysis, market definition, abuse of dominant position, collusion, merger, vertical restriction, critical loss analysis, diversion ratio, hypothetical monopoly test, EH test

The project introduces and analyzes theories and applications of economic methods for the issues in Competition Law. The purpose of this project is to provide the basic economic foundations and quantitative analytical methods to Competition agents for implementing economic analysis in antitrust issues. In fact, the antitrust economic analysis has been becoming an important role in antitrust law suits, which entails the popular use and need of mathematical and/or econometric models.

In face of a hypothetical market, the correlation between inside products and outside products generally are the most important task to solve for an antitrust case. The correlation can be measured by the inside products' elasticity of demand or the inside products' cross elasticity of demand with outside products. Usually when a small price increase of an inside product causes more of its buyers to drop from buying, its power for increasing price is lower, meaning that the price constraint of other products is higher. One or more of other products could be implied a competitor with the product and are necessary to be included to enlarge the hypothetical market. In this project, we provide nine economic methods to help define the exact market scope. In this project, we provide nine quantitative economic methods for helping define a proper market, which includes diversion ratio, the hypothetical monopoly test, the critical loss analysis, the price correlation, the vector auto regression, the Elzinga-Hogarty test, the shock analysis, the switching production analysis, and the secondary-markets analysis.

A product in a market is able to earn higher profits by increasing price without fearing losing customers, which is so-called with higher monopoly power. This type of firms could easily hurt other firms or competition of the markets through its strategies and thus need to be watched. According to Fare Trade Law in Taiwan, a firm with market share larger than 25% is entitled as a dominant firm, whose strategies need to be reviewed for violation of Fare Trade Law.

Once a firm has market share higher than 50%, it is defined as a monopoly in antitrust law. Its strategies will be strictly reviewed to prevent the price discrimination, predatory pricing, price squeeze, and/or bundle sales. Those types of strategy are intentionally used to hurt others. The economic foundation of those strategies is analyzed in this project, and the screening and review standard are introduced.

To enhance its monopoly power for achieving higher prices and profits, a dominant firm can choose to collude or merger with others. After merger, a firm increases its market share and monopoly power, thus increase its ability to increase its profits via increasing prices, which is so-called unilateral effect of mergers. Merger can also increase the industry concentration, which creates an easier environment for collude, which is the bilateral effect of merger. We provide the economic analysis of merger effects and detailed analyze the merger simulations for predicting the price markup after a merger.

In the literature for analyzing the collusive behaviors among firms, there are relatively more researches in economic theoretical approach, while much less in practical screening. This project intends to introduce the both. The economic foundation of collusive theory provides the agents of competition authority for classification of likely and unlikely behavior types of firms under collusive and/or competition. The practical screening, on the other hand, offers data study to find out the possibility of collusion. We start with the economic foundation of collusion theory and then follow the structure-behavior performance approach to discuss all those factors and mechanisms of facilitating collusion. Among these, the screening of structure aspect is generally seen as a basic screen and is the most discussed and used to facilitate collusions among firms. However, the phenomenon of identical prices or price-fixing is much more seen as a result of collusion. Be aware that the above phenomenon is only referred as a sufficiency condition of firms' collusion, not a necessity condition.

Lastly, we introduce the economic foundation and methods for reviewing the vertical deals, including refusal to deal, typing, and retail price maintenance. It has been shown that RPM may restrict the intra-brand competition but channel to increase the inter-brand competition, which is accepted by the court to claim a rule of reason in Leegin (2007).

In short, this project provides the basic methods of screening and the economical quantitative analysis for the antitrust issues, which will help the agents in Competition authority.