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A note on the market structure and performance in Korean manufacturing industries

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Abstract

This study attempts to analyze the market structure and performance of Korean manufacturing industries. The study shows the following results. (1) The analysis shows a negative correlation between price–cost margin (PCM) and concentration ratio (CR), which are the variables representing market structure and its performance. This result suggests that Bain's hypothesis [Quart. J. Econ. 65 (2) (1951) 293] cannot be applied to the Korean economy. (2) The analysis on the ratio of advertisement expenses and the ratio of R&D expenses is consistent with what this study predicted at the early stage. Therefore, it is plausible that increasing investment in advertisement and R&D is one of the methods to increase concentration ratio and price–cost margin. (3) In conclusion, the export-oriented policy strongly supported by the government has succeeded in achieving economic growth. From the perspective of industrial organization theory, however, it has distorted the distribution of resources by supporting monopolies and such economic growth seems to have been occurred at the expense of the domestic market.

JEL classification: D40; L10; L60

Keywords: Concentration; Price–cost margin; Market structure; Market performance

1. Introduction

Academic approach to industrial organizations is based on an analytic framework focusing on market structure-conduct-performance (SCP). This approach can

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be divided into two categories according to its purpose and method: the structural approach and the behavioral approach. Most studies on industrial organization were conducted in the United States between 1930s and the 1960s. These studies gained importance as monopolies became an increasingly serious economic problem both in the United States and in Europe.

Among the academics, Bain (1951), through the SCP model, showed that monopolistic or oligopolistic market structure would lead to welfare loss, as a few dominant enterprises tend to exercise their increasing market power over time, leading to an eventual deterioration in market performance. Such deterioration is one of the most important reasons to consider Bain's hypothesis:[1] that a monopolistic industry, controlled by a few enterprises, is likely to limit competition and result in excess profit because of the existence of strong market power.

Since 1951, numerous empirical analyses of Bain's SCP approach, especially by White (1974), Martin (1979), Caves (1980), Geroski (1982), and Yamawaki (1986) have shown that there is a positive correlation between the concentration ratio and the price–cost margin. Since the 1970s, some developing countries, including Mexico and Taiwan, have made empirical studies to prove the existence of this relationship in their economies.[2]

When analyzing developing countries, we must consider some unique characteristics that differ from those of developed countries. First, developing countries intentionally promote monopolies under the protection of government because monopoly is viewed as a means of overcoming the state's meager capital accumulation during the early stages of industrialization. Government encourages domestic industries with subsidies or tax reductions to promote exports, while strictly controlling imports to protect domestic monopolies from international competition. Therefore, domestic monopolies can strengthen their monopolistic power and have more opportunities to exercise it.

Second, developing countries have relatively small markets. Thus, enterprises strive to obtain a monopolistic position in these small markets, while at the same time trying to prevent other enterprises from entering. Existing firms in a small market produce goods only within an area where there are economies of scale. This means that the cost of producing one unit of goods or services decreases as the volume of production increases. Therefore, these firms implement a wide variety of strategies to impose entry barriers against new competitors, which leads to an eventual increase in social costs.

Third, foreign market factors as well as domestic factors must be properly considered because the proportion of exports and imports to GNP continues to grow as the market opening accelerates. Provided that exports and imports expand their importance as much as input and output factors in the domestic market, it is

[1] A hypothesis arguing that the size of concentration ratio leads to the difference in the ratio of price–cost margin, so the concentration ratio has a positive relation with the ratio of price–cost margin.

[2] See Chou (1986).