

## ABSTRACT

Key Words : Oil Industry、Floating Oil Price Mechanism、Dynamic General Equilibrium Model of Taiwan、Collusion

Domestic oil market was monopolized by CPC in the early stage. However, the “Regulations Governing Gas Station Installation and Administration” had published since 1987 then open the retail sales. Thereafter the Ministry of Economic Affairs had published the “Regulations on the Management of Production Licenses for Import and Export of Petroleum and Petroleum Products” in order to promote enterprise to participate the oil market in 1996. Because oil market of Taiwan was monopolized by CPC before September 2000, the domestic oil price was decided by international oil price and revenue requirement of CPC. Although the Ministry of Economic Affairs had abolished the oil price formula after Formosa Petrochemical entered into the market and then the oil price was decided by import oil cost of each company. Furthermore, Legislative Yuan of Taiwan passed the “Petroleum Managed Law” in October 2001 and established the framework for full liberalization of oil market. However, in order to avoid concerted action of oil pricing and the government interruption, Executive Yuan of Taiwan offered the improving measure of oil formula in 2006 and the Ministry of Economic Affairs announced the floating oil price mechanism in 2007. The goal of the mechanism was to allow oil price adjustments to return to the market and align with international situations. In spite of practicing the oil formula, there were still some disputes about competition and behavior of enterprise in the market. The key themes of this study is to understand the impact of competition behavior and the profit of enterprise after practicing oil formula, and the restriction of competition behavior in vertical marketing system of oil supply and demand under the situation of oligopoly by CPC and Formosa Petrochemical.

The purpose of the study includes (1) collecting the oil industry information and oil pricing mechanism of Asian neighboring countries, European countries, United Kingdom and the United States; (2) analyzing the the enforcement stance of authorities and related cases in the Asian neighboring countries, European countries, United Kingdom and the United States; (3) studying the appropriateness and necessity of floating oil price mechanism in Taiwan and the impact of economy, industry and consumer undering oil price mechanism; (4) analyzing the vertical relationship of oil industry in Taiwan and to investigate whether there are price restrictions and other related restrictions on competition then refer to the relative authorities.

We find out that the upstream of oil industry in Asian neighboring countries, European countries, United Kingdom and the United States had few supplier because of high capital expense and scale economic and the downstream of oil industry (gasoline station) had a lot of competitors. Besides, the business model in gasoline station market was full of diversity. Secondly, the oil pricing mechanism was practicing in China and Taiwan and that of in the other countries was decided by the free market. However, most countries was take some measures such as environment requirement, oil quality, tax and days of inventory to manage the oil market. Thirdly, the owner of gasoline station would like to adopt the way of non-price competition to draw client and the geographic characteristic was also an important factor for competition. Besides, in many countries, competition authorities tried to distinguish lawful from unlawful conduct in the absence of direct evidence of an agreement. However, it has often been a challenge to prove that there are problems indeed as there are often no explicit and illicit horizontal agreements. In addition, there were only two oil supplier (CPC and Formosa) in Taiwan and CPC had its own gasoline station. When CPC operate its own gasoline station and provided oil products to franchisee in the same time, it would lead to the competitive-cooperative situation. Moreover, there were a lot of discussions and disputes for floating oil

price mechanism in Taiwan such as the basis of calculation, weight setting, item, exchange rate et al.

According to the result, we recommend to clarify the accounting system of oil company for revising the parameters of floating oil price mechanism in Taiwan. We suggested that the floating oil price mechanism should be reviewed per year and the oil price should be decided by the market in the long run. Secondly, CPC and Formosa provide oil products to group gasoline station and franchisee. Because the term between group gasoline station and franchisee was different, it was easy to lead to unfair competition in the market. The government should investigate the fairness among those contracts. Moreover, the operation expense for gasoline station was too rigid to maintain the business and make normal profit. The government should build up a mechanism to reflect the cost variation in order to keep the right for gasoline station owners and consumers. Thirdly, we recommend the government to improve the transparency of the effective retail price to allow consumers to make more informed choices and increase competition in the petroleum market. It is really necessary to amend the existing mechanism of dirty-floating oil price adjustment and to solve its dilemma. We expect to see another feasible alternative is, directly, to replace the current oil price adjustment mechanism with a brand-new oil-pricing law.

