

An Analysis of Factors Determining Trade Policies in Korea

Research on factors determining trade policies may be said to have started in earnest with the development of endogenous trade policy theory in the late 1980's. This research activity was conducted intensively particularly after Grossman and Helpman published a political economy model of trade protection (the G-H Model). However, Korea has failed to attract such large-scale research on the factors determining trade policies. This has been mainly attributable to the lack of theoretical research on the factors involved in determining trade policies, as well as to the inadequacy of the basic research needed for empirical analyses such as an estimation of the price elasticity of imports by specified item. Against this backdrop, this paper estimates the price elasticity of imports in Korea using the most advanced methodology and, based on the estimation, carries out an empirical analysis of the factors determining trade policies in Korea, in other words, the level of trade protection in Korea. This paper, in particular, introduces and uses the extended GH model, additionally reflecting the trading and industrial characteristics of Korea in an effort to enhance appropriateness of the analysis.

The results of the empirical analysis show the characteristics of price elasticity of imports in Korea and the factors determining trade policies, which may be summarized as follows. First, according to the analysis, imports of consumer goods show high price elasticity, while those of basic materials have low elasticity. This implies that changes in import prices, whether resulting from the imposition of tariffs or other reasons, have a greater impact on consumer goods than on basic materials. In addition, the price elasticity of imports is seen to stand in a converse relationship to the level of trade protection. This means that the higher price elasticity of imports, the lower the level of trade protection. The reason is that the higher elasticity brings about the imposition of tariffs and other consequences, thus, causing higher social welfare losses. Second, in industries with access to political influence, such as interest-groups, a higher import penetration ratio (import amount/GDP ratio) results in lower trade protection, since the gains domestic enterprises earn from tariff imposition are small. Third, the analysis shows that, in terms of trading characteristics, an increase in the tariff rate on intermediate inputs undertaken in a bid to protect domestic producers of such items results in heightened trade protection, influenced by requests for trade protection from producers of finished goods. It was also analyzed that trade protection was reduced for industries with a high proportion of exports that are likely to face trade retaliation abroad for domestic trade protection.

Fourth, in terms of industrial characteristics, it is found out that the government increases the level of trade protection for industries which either show a high proportion of temporary workers and low-skilled workers or are labor intensive, since the impact of trade protection for such industries, such as winning political support and increased benefits for workers, are great. Fifth, the influences of the proportion of temporary workers in determining trade policies was found to be greater in 2003 than prior to the Asian currency crisis(1995), while the impacts of the possibility of trade retaliation (export amount/GDP ratio), the tariff rate for intermediate inputs, and the capital-labor ratio declined. This change in the relative importance of the factors determining trade policies implies that the Asian currency crisis served as a factor in changing trade policies in terms of structure.

This paper's significance resides in the following aspects. First of all, it has made an estimation of the price elasticity of imports in to Korea by specified item based on the theoretically outstanding GDP function approach. Unlike other studies, this paper has verified the stability of time-series data and selects the optimal time lag based on the Schwarz criterion in order to enhance appropriateness of the estimation. In addition, the paper also has also extended the GH model theoretically for the first time in Korea, thus, accommodating the trading and industrial characteristics of Korea, to carry out an empirical analysis of the factors determining trade policies. Furthermore, it has also proved that its attempt to extend or complement the GH model is reasonable by identifying the importance of trading and industrial characteristics determining trade policies.

The extended GH model used in this paper in combination with a Computable General Equilibrium (CGE) model with estimates on the price elasticity of imports as its parameter can be used to analyze metrically the effects of trade policies. Moreover, if the extended GH model for Korea were to be further extended to include nations seeking economic unity Free Trade Agreements or other methods, it could be employed to analyze the economic impact of such integration.