

MASTER'S THESIS

Trade effects of the development of ASEAN+ free trade agreements: an empirical study

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**Trade Effects of the Development of ASEAN+ Free Trade
Agreements: An Empirical Study**

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for the degree of
Master of Philosophy**

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ABSTRACT

This paper applies gravity model to investigate the development of ASEAN+ Free Trade Areas (FTA) on its members and non-members. ASEAN, ASEAN-India, ASEAN-China, ASEAN-Korea, ASEAN-Japan, ASEAN-Australia-New Zealand Free Trade Areas are all taken into consideration. There is discrepancy in the econometric models used in previous literatures. In this paper, all the feasible econometric approaches — fixed-effects, random-effects and first-differencing models are tested and compared. Among all the econometric methods, bilateral fixed-effects and two-way fixed-effects models are more appropriate and statistically justified. Also, the endogeneity of the model is addressed by incorporating multilateral or relative trade resistance terms, and industrial similarity index. Industrial similarity index is first added and shown to be statistically significant, reducing the omitted variable bias.

Based on the estimated results, ASEAN FTA demonstrates pure trade creation, ASEAN-India FTA increases intra-bloc trade, and ASEAN-China FTA raises extra-bloc trade. The trade impact of ASEAN-Japan is negative while that of ASEAN-Korea and ASEAN-Australia-New Zealand are statistically insignificant. A reduction in the effectiveness of the later-formed FTAs suggests that “Spaghetti Bowls Phenomenon” (problems brought by the overlapping FTAs) may exist. ASEAN should accelerate the formation of ASEAN+6 FTA or consider a broader Asian Community to replace a class of the overlapping FTAs.

The effects of two devastating events in Asia – Asian Financial Crisis and SARS on ASEAN FTA will also be investigated. The findings illustrate that both events weaken the intra-bloc trade and extra-bloc import creation power of ASEAN. Moreover, the proposed ASEAN+6 members are divided into two groups, developed and developing, according to their stages of development. The results reveal that the extended ASEAN FTA elevates exports of the developing group at the expense of the developed group.

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