An Assessment of Sri Lankan Trade Dynamics among Asian Countries: A Gravity Model Approach

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ABSTRACT

Foreign trade is an essential part of the total developmental effort and national growth of the economy. One of the most striking economic developments of the mid 1990s has been the proliferation of Regional Trading Arrangements. Their presence, in today's multilateral trade regimes has almost become a common phenomenon. The success stories of EU, NAFTA, MERCOSUR, and ASEAN, propelled the sri lanka Sub-Continent to sign SAFTA (South Asian Free Trade Area) to be implemented from January 2006 onwards. In this recent initiative, SAARC members agreed that SAPTA (South Asian Preferential Trade Agreement) would begin the transformation into South Asian Free Trade Area (SAFTA) by the beginning of 2006, with full implementation completed between 2009 and 2013. The underlined agenda was to get the region rid of poverty and to surge in economic development. Sri lanka being an important constituent of the region is expected to be benefited hugely from this integration. A large number of researches support the important role of distance to explain the trade volume between two countries. Distance is most likely to the represent transportation cost among other trade barriers associated with trade cost, namely adjacency, preferential trade arrangement, languages and others as discussed methodically in (Anderson & Wincoop, 2001). The gravity model is a popular formulation describing the trade flows between different geographical entities. The model says that there is negative relationship between geographical distance and trade volume which indicates that the lower distance influences for more trade and vice versa. This study is an effort to apply the general gravity model to analyze the Sri Lanka's trade with its Asian major trading partners using the panel data estimation technique. The estimates cover 13 countries using trade statistics relating to a period of 36 years (i.e. from 1977 to 2013).

The OLS technique and the second stage fixed effects and country specific factors were analyzed. The random effect was tested at the third stage. The research found the fixed effect model was the best fit in the application of gravity model for Sri Lanka's bilateral trade. This was confirmed by Hausman's specification test.

The estimation results show that the Sri Lanka's trade is affected by size of the economy, per capita GDP differential of member countries, openness, relative exchange rate and population size. The evidence on country specific effects shows that Sri Lanka would do better by not engage in trade with its neighboring countries in the Asian region. Countries like India and EA have come up with strong country effects in determining the dynamics of Sri Lankan trade. Within the Asian region, Sri Lanka's trade potential appears to be very high with respect to India. The research emphasizes the need for strong economic incorporation between Asian regional members to improve regional trades.

Key words: Sri Lanka, Bilateral Trade, Asian Region, Panel data, Gravity model