

## THE TRADE POTENTIAL OF SRI LANKA: APPLICATION OF THE GRAVITY MODEL

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International trade has become an essential element in the growing economies and therefore exports determine the economic power of the country. During the last 15 years, direction and magnitude of Sri Lanka's trade have moved towards the market of commodities, especially, in the context of changing global demands, and new trade agreements. The objectives of this study are to identify the trade determinants of Sri Lanka's trade using the extended gravity model and then estimate Sri Lanka's trade potential to recommend a specific trade policy to promote foreign trade. The gravity model of international trade takes the concept from Newtonian physical science that the gravitational force between any two objects is proportional to the product of their masses and inversely proportional to distance, similarly, trade between any two countries is proportional to the product of their GDPs and inversely proportional to distance. The study employs panel data of annual observations on a cross-section of 27 major trading partners of Sri Lanka over 15 years between 2000 and 2015 in order to analyze the determinants of Sri Lanka's trade flows within the framework of the gravity model. This paper uses data on exports published by the United Nations Commodity Trade Statistics (UN-COMTRADE). The coefficients obtained from the model are then used to predict Sri Lanka's trade potential worldwide and within the region. The estimated coefficients show that the gravity model is very successful in explaining the determinants of Sri Lankan exports. Coefficients of the standard gravity variables such as GDP Per Capita, Population, Distance, Trade openness, Real Exchange rate, and Bilateral Trade Agreements (BTA) bear expected signs, and these variables are statistically significant. As per basic idea of the gravity model, distance to trade partner countries is highly significant implying higher the distance lower the trade. The country-specific fixed effect model shows that time-invariant factors are also substantial to determine Sri Lanka's trade. Further, the results reveal that Sri Lanka's trade potential is high with India, China, Malaysia, USA, Ukraine, UK, France, Pakistan, Japan, Israel and Saudi Arabia. Therefore, Sri Lanka should explore ways and means to improve its trade relations with the countries concerned. Sri Lanka's trade potential with Singapore, Thailand, Sweden, Switzerland, Poland, Germany, Belgium, Hong-Kong, UAE and Chile, is already exploited and the actual trade exceeds the potential in recent years.

*Keywords:* Trade Potential, Gravity Model of Trade, Bilateral Trade Agreements