

## Trade performance of Sri Lanka in SAARC markets: An empirical analysis

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### Introduction

Brief review of studies presents various issues relating to Sri Lankan trade performance in terms of trends in import and exports, policy issues, protection measures and trade agreements. However, focus on Sri Lankan price competitiveness in international as well as SAARC markets seems to be neglected area of research. The study attempts to analyze the trade performance and price competitiveness of Sri Lanka in the SAARC region by examining various interrelated indicators and aspects. Main objectives of the study are to review the demographic, social and economic indicators of SAARC countries, analyze the trends and share of Sri Lanka's trade position in SAARC Markets and study about the price competitiveness of Sri Lankan exports to SAARC Markets.

### Methodology

The study is based on secondary data that were drawn from different sources. Data relating to various demographic, social and economic indicators, exports, imports and commodity wise trade are tapped from different Websites, World Fact Book, World Bank, Annual Reports of Central Bank of Sri Lanka, International Trade Centre etc. Analysis based on cross-section data is considered for the year 2015/2016, while time series analysis is considered for the period 2000 – 2015/2016. The study is carried out using techniques such as percentages, averages, growth rates. Trends in exports and imports are studied by estimating the semi log linear form given by  $\log Y = \beta_0 + \beta_1 t$ , where Y is the dependent variable considered as exports/imports, t is the time variable,  $\beta_0$  is the intercept term and  $\beta_1$  is the coefficient of time variable which gives the compound annual growth rate. The price competitiveness of Sri Lankan exports to World countries is analyzed by estimating the multiple log linear regression models as given by

$$\log X_i = \beta_0 + \beta_1 \log \text{GDP World} + \beta_2 \log \text{REER} + u \text{ ----- (1)}$$

where  $X_i$  denotes the Sri Lankan total exports to World countries (in US \$ million), GDP World is the summation of GDP of World countries

*excluding the GDP of Sri Lanka and REER is the Real Effective Exchange Rate of Sri Lankan rupee against US dollar,  $u$  is stochastic disturbance term.  $\beta_0$  is the intercept term, while  $\beta_1$  and  $\beta_2$  are elasticity coefficients of log GDP World and log REER.*

In order to examine the price Competitiveness of Sri Lankan exports to SAARC markets, the regression equation considered is given by

$$\log X_i = \beta_0 + \beta_1 \log \text{GDP SAARC} + \beta_2 \log \text{REER} + u \text{ ----- (2)}$$

*where  $X_i$  denotes the Sri Lankan total exports to SAARC countries (in US \$ million) and GDP SAARC is the summation of GDP of SAARC countries excluding the GDP of Sri Lanka. Interpretation of all constants, REER and  $u$  is same as in equation (1).*

The price competitiveness of Sri Lankan exports to India is studied by estimating the regression equation given by

$$\log X_i = \beta_0 + \beta_1 \log \text{GDP India} + \beta_2 \log \text{ARE} + u \text{ ----- (3)}$$

*where  $X_i$  is the export of  $i^{\text{th}}$  commodity ( $i = 1, 2, \dots, 9$ ) to India (in US \$ million) and the list is given separately. The variable GDP India is the GDP of India, ARE is the average rate of exchange of Sri Lankan rupee against Indian rupee. The interpretation of all constants and  $u$  is same as in equation (1).*

The rationale for considering the variables is, because the demand for exports of a country depends not only on income of the importer, but also on the export price of the supplier country. Hence, REER/ARE is considered to reflect the export price. On 'a priori' grounds, the sign of  $\beta_1$  is expected to be positive, since higher the income, the greater will be the imports of a country. Further, if export price is competitive, then greater will be the imports and vice versa, hence, positive sign is expected for  $\beta_2$  when price is competitive, while negative sign is expected for  $\beta_2$  when the price is not competitive. The regression equation is estimated by applying OLS method under given assumptions.

### **Results and conclusion**

Comparative analysis of demographic, social and economic indicators relating to SAARC countries (2015) reveals good and comfortable position of Sri Lanka among the SAARC countries. Sri Lanka relatively with a low population pressure (3<sup>rd</sup> least among SAARC with 207.15 lakh), low population growth (least among SAARC with 0.5% annual growth rate), low density of population (4<sup>th</sup> least with 330/SK) is enjoying high life expectancy of 75 years, which is the 2<sup>nd</sup> highest among the SAARC countries. Sri Lanka with a high literacy rate (2<sup>nd</sup> highest among SAARC with 93%), low dependency rate of 39 percent is enjoying more productive population with a median age of 32 years. Sri Lanka with a GDP of about US\$ 238 Billion (4<sup>th</sup> highest among SAARC) registered growth rate of 5 percent is found to have a per capita income of US\$ 11,189 (2<sup>nd</sup> highest among

SAARC) is noticed to record its Gross Fixed Capital as 28 percent of its GDP (3<sup>rd</sup> largest among SAARC) and gross domestic savings as 24 percent of its GDP (4<sup>th</sup> largest among SAARC). Sri Lankan public health spending accounted for 2 percent of its GDP (4<sup>th</sup> least among SAARC), while its expenditure on education accounted for 2.18 percent its GDP (2<sup>nd</sup> least among SAARC). However, Sri Lankan public debt recorded for 77 percent of GDP (the highest among SAARC), while unemployment rate recorded at 4.7 percent (4<sup>th</sup> largest among SAARC) with a labour participating rate of 52 percent (2<sup>nd</sup> least among SAARC). It is pertinent to note that among the SAARC nations, only Sri Lanka has successfully secured place in the high human development group countries with a HDI value of 0.766 and Rank 73.

Sri Lanka's total exports to World countries during the period 2001 – 16 registered for an annual growth rate of 6.19 percent, while total imports recorded for an annual growth rate of 9.5 percent. Thus, total export – import gap has been increasing at the rate of 3.31 percent points indicating an average trade deficit of US \$ 48,93,510 thousand over the study period. Further, annual growth rates of Sri Lankan exports to SAARC countries and imports from SAARC countries are found to be 9.34 and 11.71 percent respectively. Thus, exports – import gap from SAARC markets also found to experience growth of 2.37 percent points and resulted in an average trade deficit of US \$ 21,23,497 thousand. The average share Sri Lankan exports and imports to SAARC countries accounted for 8 percent and 21 percent respectively. Sri Lanka is found to earn the highest exportable surplus from Maldives (about 96 %), followed by Afghanistan (about 78 %) and Bangladesh (about 64 %). However, very large trade deficit is noticed with India (about 434 %) and Pakistan (about 262 %). Based on export – import growth rates, Sri Lanka is expected to enjoy exportable surplus from all SAARC markets except from India and Pakistan. Hence, Sri Lanka may explore to tap the other SAARC markets, so that it may earn trade surplus.

The regression analysis corresponding to export of principle commodities of Sri Lanka to India implies that 5 out of 9 commodities ( $X_1$ ,  $X_4$ ,  $X_7$ ,  $X_8$  and  $X_9$ ) are more price elastic, while  $X_5$  and  $X_6$  are more income elastic. The commodity  $X_3$  is observed to be equally elastic with respect to both income and price, while  $X_2$  is noticed to be income elastic and non-price competitive. Thus, Sri Lankan export of principal commodities to India is found to be relatively more income elastic rather price elastic implying that income of India is relatively the dominant variable affecting Sri Lankan exports when compared to exchange rate. The analysis also implies that, in addition to income, price competitiveness is also a significant variable effecting Sri Lankan exports to India. The regression analysis corresponding to all commodity exports to SAARC markets are said to be both income and price inelastic. Perhaps it may be the reason for lower share of

commodity exports to SAARC markets in the total commodity exports of Sri Lanka. At the same time, Sri Lanka's export of all commodities to World markets is found to be relatively more income elastic rather than price elastic.

To sum up among the SAARC countries, Sri Lanka with comparative advantage of low population and density, higher literacy levels, high human development and with reasonable growth of real GDP and per capita GDP is expected to perform well on the external sector. However, Sri Lanka has been facing trade deficit with in SAARC region should improve price competitiveness.

**Keywords:** *Export-Import gap, GDP, price competitiveness, SAARC, trade deficit.*