

**EVALUATION OF THE POTENTIAL IMPACT OF
EXPORTS & IMPORTS COMMODITIES INTO THE
SRI LANKAN ECONOMY**

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DECLARATION OF THE CANDIDATE & SUPERVISOR

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ABSTRACT

The research attempts to evaluate the impact of Exports and Imports commodities on the country's economy. Mainly, the following objectives are elaborated: behavior of exports and imports, to determine which type of commodity mainly impacts the country's economy, to understand the theoretical link between total exports and imports commodity groups, and to revisit total exports and imports groups by investigating hidden factors impacting the country's economy. The data are collected mainly from 2007 to 2017 on a monthly basis from the Central Bank of Sri Lanka and the Census & Statistics Department, Sri Lanka. Although total Exports and Imports commodities have been studied with many statistical and economic methods, the researcher has tried to study the similarities of commodity groups and differences. Various statistical techniques have been used such as Basic Statistical, Principle Components (*PCA*), Factor Analysis (*FA*) and *VARI-MAX* Factor Rotation. With the strong basis on the preliminary analysis, there are strong correlations among the commodities. This paper adopts the Principle Component and Factor Analysis to assess eight commodity groups by finding out the level of redundancy among them from the correlation matrix and grouping indicators with higher similarities into the same factors in Exports and Imports separately. According to the similarities, Agriculture Exports, Mineral Exports and Consumer Imports and Investment Goods Imports are categorized accurately. But there is no proper grouping for Industrial Exports & Intermediate Imports. Based on the rearrangement of commodities, seven components are identified for Total Exports and eight components are identified for Total Imports according to Factor analysis and improving the results using *VARI-MAX* Rotations. Also, there are no rapid improvements for all commodities except Garments, Tea and Petroleum sectors. These groups are highly impacted by the Gross Domestic Product (*GDP*) and need reliable improvement to eliminate the negative impact on the country's economy. Furthermore, the Balance of Trade is a negative value. When determining which type of commodity mainly impacts the country's economy, Garment & Textile, Tea & Petroleum Products are critical in the Export sector. But, there is a lack of attention for the agriculture sector.

Key Words: *PCA, FA and VARI-MAX FA*

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LIST OF ABBREVIATIONS

PCA - Principle Component Analysis

PC - Principle Component

FA - Factorial Analysis

GDP - Gross Domestic Products

GSP+ - Generalized Scheme of Preference Plus