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# Determinants of Export Competitiveness: An Empirical Study of Tea Industry in Sri Lanka

by

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A thesis submitted to the University of Sri Jayewardenepura in partial fulfillment of the requirements for the Degree of Master of Science in Management on 31st January 2013.

**Declaration of Student**

The work described in this thesis was carried out by me under the supervision of Dr. P.J. Kumarasinghe and a report on this has not been submitted in whole or in part to any university or any other institute for another degree/diploma.

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Date: 17/06/2014

**Declaration of Supervisor**

I certify that the above statement made by the candidate is true and that this thesis is suitable for submission to the university for the purpose of evaluation.

Dr. P.J. Kumarasinghe

Signature:

Date:

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## ABSTRACT

Export development plays an important role in promoting economic growth and development. Understanding of export competitiveness has primarily been pursued in terms of economic variables and market conditions. The thesis involved an investigation into the determinants of export competitiveness of tea industry in Sri Lanka. The main purpose of this study is to identify the factors which affecting to the competitiveness of tea industry in Sri Lanka and to develop a framework that helps to enhance the competitiveness of tea industry. This study integrated perspectives from export competitiveness, the resource based view of the firm, local and foreign demand conditions of the firm, association with related and supporting industries, government sources and brand loyalty. Quantitative research approach was used and Porter's diamond model with some adaptations was taken as proposed model of this study. E-mail survey compromised with the structured questionnaire was used to collect primary data from the sample. Key managers of tea exporting firms were considered as the respondents. Partial least squares structural equation model (PLS-SEM) was utilized to analyze the contribution of each factor on tea export competitiveness. The data obtained from the firm level survey were analyzed using Smart PLS version 2.0 and SPSS (version 16) statistical packages. Supported by the empirical evidences this study found out that factor conditions have the most significant influence of export competitiveness

of tea industry and the second important is government support. Followed by government support, demand condition and brand loyalty have also made positive impact on export competitiveness of tea industry in Sri Lanka. Then the results suggested that factor conditions, demand conditions, government support, brand loyalty and related and supporting industries can help Sri Lankan tea industry to sustain its competitive advantage. While identifying important elements, results indicated that raw material, technology, physical infrastructure, information infrastructure, related industries, and firm characteristics have significant impact. Giving priority to those elements strategies should be developed to enhance competitiveness of Sri Lankan tea export. By creating favourable conditions, Sri Lanka can remain competitive in the global tea market. Furthermore, it is more vital to conduct a comparative analysis of determinants of export competitiveness and to assess the interaction among the factors affecting to export competitiveness.

Key words: Tea industry, Competitiveness, Porter's diamond model, Partial least squares structural equation model

# 1. INTRODUCTION

The process of economic integration, globalization and technological advancement strengthen export development of nations. Export development plays an important role in promoting economic growth and development. It contributes significantly to enhance capital inflow, reduce trade balance deficits, make balance of payment (BOP) surplus, increase employment and expand the production base of a nation. As a result of increasing size of international trade, the concept of export competitiveness plays a vital role in international trading system. Export competitiveness has been paid more attention in order to develop export portfolio of nations. To promote economic development and survival in the global competitive market, export competitiveness is an essential component of a country.

The nation's long-term survival depends on how it compares with other countries which produce similar products. For small economies, export is substantial in sustaining growth and vitality (Saboniene, 2009, p.49). Export contributes economy in terms of capital inflows, employment, expansion of industry widening the production base, and achieve economies of scale in domestic industries.

Sri Lanka's national economy has expanded during the post independent period. In 1950 Sri Lanka recorded US $ 1 billion gross domestic product and it has expanded to US $ 60 billion in 2012. Throughout this expansion, service sector provides mass contribution to national economy. The expansion of domestic production does not contribute much on the external sector (depends on domestic market); it can be examined by referring declining share of Sri Lanka's export on GDP and world trade. The share of Sri Lanka's

export as a percentage of gross domestic products (GDP) is fluctuating from time to time, however, after 2005 it shows a continuous declining tendency. Considering the time period; in 1950, share of export of GDP was 28 percent, 1970 it was 20 percent, in 2000 it was 33 percent, 2005, 26 percent, 2007, 24 percent, 2009, 17 percent, 2010, 18 percent, 2011, 18 percent and last recorded in 2012 it was 16.67 percent (Central Bank Reports). There is no significant expansion of foreigners' demand for Sri Lanka's products. Since 2005, economic growth has recorded above 6 percent and last two years (2010 and 2011) it reached to 8 percent. Declining tendency of export share of GDP indicates that Sri Lanka was unable to raise its export at least at the same rate as GDP growth. Depending on domestic market is not a good development signal for a country like Sri Lanka because it does not have a strong domestic market compared to India and China.

World export value has doubled during the time period from 2000 to 2011, but Sri Lanka's export value increased relatively little amount compared to other Asia countries like India, Bangladesh, Thailand, Vietnam and Philippine. For an example; India, Bangladesh, Indonesia, Philippines, and Vietnam increased their export market share in 2011, compared with 2010 export market share, by 17, 15, 10, 9, and 18 percent respectively. Sri Lanka's share in the world total export has declined drastically from year 2000 to 2011 (Table 1.1). Based on the International Trade Center (ITC) statistical data, Sri Lanka's share in world export; 2000 – 0.08 percent, 2005 – 0.06 percent, 2009 – 0.05 percent, 2010 – 0.048 percent 2011 – 0.04 percent and 2012 – 0.055 percent.

**Table 1.1: Export volume and share of selected countries**

| Country | Export Volume (US $) | | | Export as a percentage of world export | |
|---|---|---|---|---|---|
| | 2001 | 2010 | 2011 | 2010 | 2011 |
| Thailand | 64,919,226 | 195,311,520 | 228,823,973 | 1.26 | 1.26 |
| Philippines | 31,150,203 | 38,435,802 | 51,497,515 | 0.33 | 0.36 |
| **Sri Lanka** | **4,672,001** | **8,304,052** | **10,010,818** | **0.048** | **0.04** |
| Vietnam | 15,029,192 | 72,236,665 | 97,730,073 | 0.46 | 0.54 |
| India | 43,878,489 | 220,408,496 | 301,483,250 | 1.42 | 1.66 |
| Bangladesh | 5,417,273 | 19,955,832 | 25,891,270 | 0.13 | 0.15 |
| Singapore | 121,753,789 | 351,867,167 | 409,503,631 | 2.25 | 2.25 |
| Indonesia | 56,316,867 | 157,779,103 | 203,496,619 | 1.01 | 1.12 |

**Source:** International Trade Center (ITC) database

Sri Lanka being a tiny economy has an insignificant share of exports in the world exports. It is even less than 1%. Thus, its share in world exports amounted to about 0.085% in 2000 and that share had declined to about 0.055% in 2012. It depicts that when the world exports have been rising, Sri Lanka has failed to keep pace with the global growth trends. It demonstrates the existence of a serious structural problem relating to Sri Lanka's export sector and immediate measures must be applied to correct those structural issues.

### 1.1 Competitiveness Index and Sri Lanka

The Atlas of Economic Complexity Index (ECI) assesses the complexity of each product produced by a nation. The ECI measures ubiquity (number of countries that a product is connected to) and diversity (number of products that a country is connected to) of a particular product. The ECI shows a clear picture on competitiveness of a country's product. In the ECI (2011), Sri Lanka's ranking in the index is No.71. While comparing