

## Impact of Air Cargo Exports and Economic Growth of Sri Lanka

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### Introduction

The air cargo plays an important role in international trade of goods between countries in the world. International trade contributes much on creating and maintaining a greater intimacy in between countries in the world while facilitating much on being a globalized village by the world countries. It is very essential for each and every country to participate in international exchange mode of goods with highly efficient, low cost, less time consuming supply of goods to the global network with higher accessibility. The low cost and high accessibility orientations have led for various countries to use air cargo as their cargo medium in international trade of goods.

As an emerging economy in the South Asian region, Sri Lanka needs to engage in favorable international trade activities with the rest of the world. Accordingly, it is very essential for Sri Lanka to participate efficiently in international trade activities since the international trade directly links with the country's economic growth. The economic growth directly links with country's Gross Domestic Product (GDP). GDP is the total market value of all final goods and services produced in a country in a given year. The annual change of the GDP compared to the previous year represents the country's economic growth rate for the considering year. Accordingly, it is vital to identify the significant impact of air cargo in international trade by Sri Lanka since it serves as the higher efficient, less time consuming cargo handling medium which can directly links with the economic growth of Sri Lanka. Therefore, this research was aimed at identifying the impact and that air cargo exports does on economic growth of Sri Lanka.

### Methodology

The research primarily used secondary data in relation to the Economic Growth (GDP), Labor Force (LF), Capital (C), Domestic Investment (DI), Foreign Direct Investment (FDI), Air Cargo Exports (ACE) and Money Supply (MS) from Central Bank Annual reports, Air Port and Aviation (Sri Lanka) Limited Annual reports and Air Cargo department statistics at Bandaranayake International Airport (BIA). Time series data was collected for the years from 1998 to 2008. A regression analysis was used as an empirical model and descriptive methods like tables, graphs, charts were also used. The regression equation was,

$$EG = \beta_0 + \beta_1 LF + \beta_2 C + \beta_3 DI + \beta_4 ACE + \beta_5 FDI + \beta_6 MS + U$$

### Results and Discussion

In accordance with the data analysis of the research study, the empirical model is overall significance at 1% ( $P = 0.00001$ ) where the overall model carries 99% of confidence level. The results suggest that 99% of the variation of economic growth can be explained by the identified independent variables within this study scope.

The regression equation was estimated as follows.

$$\text{Log(GDP)} = 10.653 + 1.382 \text{ log(LF)} - 0.069 \text{ log(C)} + 0.357 \text{ log(DI)} + 0.213 \text{ log(ACE)} + 6.50 \text{ FDI} - 1.14 \text{ MS} + U$$

The contribution and the impact of air cargo was spotted in this study scope among all the variables. Accordingly, it depicts that there is a 0.213 change in GDP of Sri Lanka due to one unit change in the growth rate of air cargo exports. Further, Therefore, if the predictor variable (GDP) is increased by one unit, then the situation will lead to increase 6.5 of FDI, 1.3 of LF, 0.35 of DI.

### Conclusion

This research study primarily focused on identifying the significant impact of air cargo exports on Sri Lanka's economic growth. Accordingly, the research study identified that the growth rate of air cargo exports of Sri Lanka directly impacts on GDP of Sri Lanka where the air cargo exports growth rate is positively and significantly impact upon the Sri Lanka's economic growth. Further, the research identified that the one unit growth of air cargo exports provides a positive 0.213% of contribution  $Dlog(ACE) = 0.213\%$  for the GDP of Sri Lanka which directly links with the Sri Lanka's economic growth.

### References

- Bowen, L.T., Leinbach, T. R., 2003. Air cargo services in Asian industrializing economic electronics manufacturers and the strategic use of advanced producer services, *Papers in Regional Science*, volume 82, issue 3, July 2003, pages 309- 332.
- Kasarda, J. D., Green, J. D., 2005. Air cargo as an economic development engine: A note on Opportunities and Constraints, *Journal of Air Transport Management*, volume 11, issue 6, November 2005, pages 459- 462.
- Ohashi, H., Kim, T. S., and Oum T.H., 2005. Choice of air cargo transshipment airport: An application to air cargo traffic to/ from Northeast Asia, *Journal of Air Transport Management*, volume 11, issue 3, May 2005, pages 149- 159.