Factors Affecting on the Global Market Share of Sri Lankan Tea

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Introduction

The tea industry of Sri Lanka has not performed well recently in the competitive global tea market. The slowing of growth is creating more global competition for market share. The country is conceding its market share to emerging producers like Kenya and other African producers. As the global tea industry is very competitive, the slow market growth means each producer faces the challenge of maintaining their position (Ali et al, 1997). Market share is an effective indicator of global competitiveness. Yet market share of Sri Lankan tea industry is mainly affected by various internal and external factors. Therefore, this research was carried out to determine the major internal factors affecting on the market share of Sri Lankan tea and to forecast the trend of Market Share with the identified internal factors.

Methodology

Time series data on average black tea yield in Kilograms and Sri Lanka's world percentage share of tea exports from 1987 to 2011 were collected from statistical bulletin published by Sri Lanka Tea Board and time series data on cost of production of tea, Free on board price (F.O.B Price), value added percentage of GDP, Colombo auction prices, quantity sold at Colombo auction from 1987 to 2011 were collected from annual reports of central bank of Sri Lanka, which provided a total of 25 years tea industry data. MINITAB 15 software was used to get the basic descriptive statistics, correlation, multiple regression analysis and Trend analysis. Correlation analysis was done to determine the relationship between the factors. Then Multiple Linear Regression was used to analyze the relationship between independent variables and dependent variable. Trend analysis for Market share, Colombo auction price, cost of production and productivity was employed by using Minitab 15 Statistical software and based on MAPE value, the best model was selected.

Results and Discussion

Regression model
Market Share = 15.2 + 0.00755*Productivity + 0.0007 COP + 0.0045 FOB price + 0.260 Value Added percentage of GDP - 0.0177 Colombo Auction Price - 0.0175** Quantity Sold at Colombo Auction
*Denotes statistically significant at 95 percent level ($p<0.05$)
**Denotes statistically significant at 90 percent level ($p<0.1$)
$R^2 = 0.818$

The result revealed that the market share is significantly determined by the productivity at 5% probability level and quantity sold at Colombo auction at 10% probability level. According to the analysis, there was no significant relationship between market share and cost of production, value added percentage of GDP, FOB price and Colombo auction price. However, the overall model is significant as the recorded R^2 value was 0.818.

Figure 1 depicts a general downward trend in global market share of Sri Lankan tea for coming 25 years. Best fitted model for market share is $Yt = 18.668 + 0.376t - 0.01772t^2$ which has 18.67 coefficient. Figure 2 shows a downward trend in productivity for next 25 years. Best fitted model for productivity is $Yt = 746.7 + 83.0t - 2.322t^2$, which has 746.7 of coefficient. Figure 3 shows an upward trend in Colombo auction price for coming 25 years. Best fitted trend model for Colombo auction price is $Yt = 37.4172\ (1.09550^t)$, which has 37.4 of coefficient.

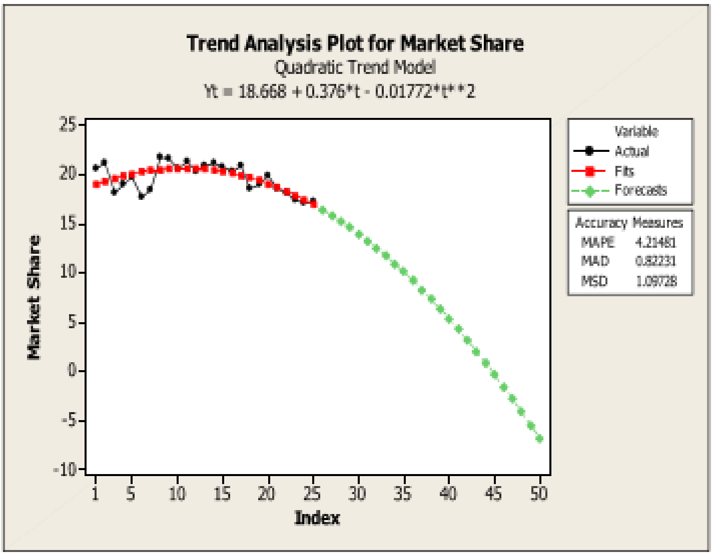

Figure 1. Trend analysis for market share.

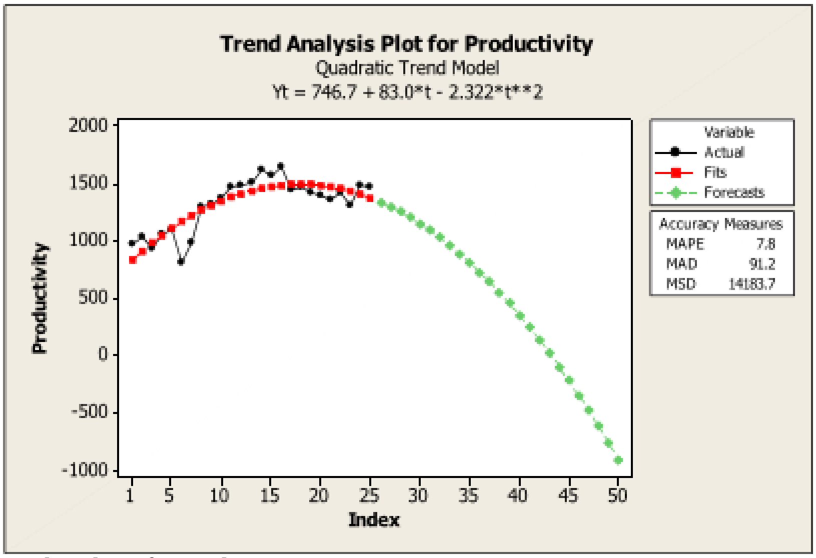

Figure 2. Trend analysis for productivity.

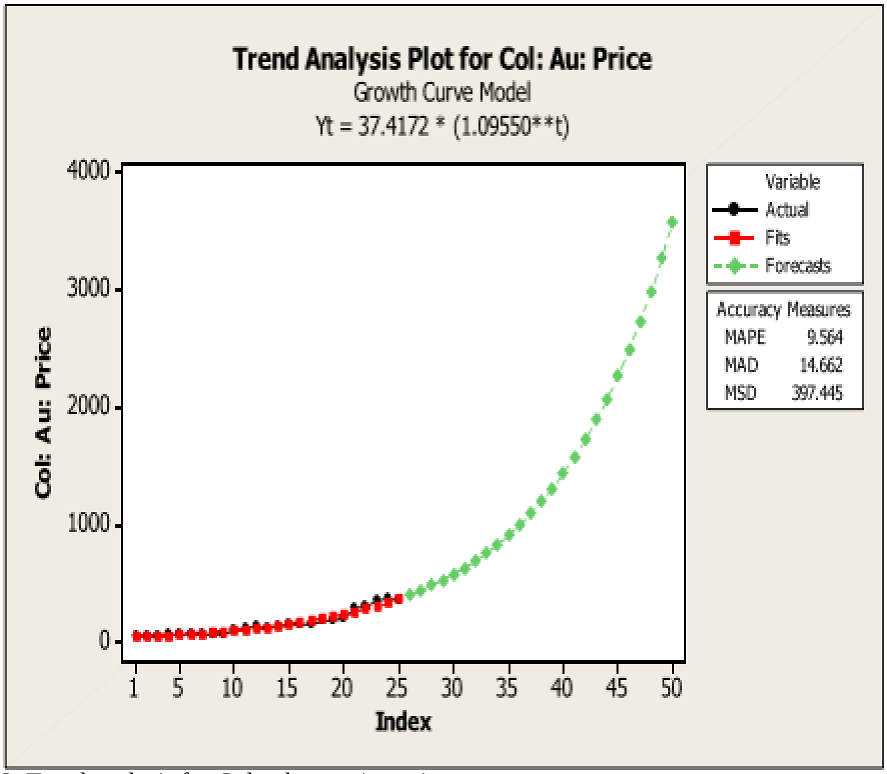

Figure 3. Trend analysis for Colombo auction price.

Conclusions

The results revealed that concerned internal factors have strong effect on the market share of Sri Lankan tea. Among concerned factors productivity, cost of production and Colombo auction price have strong relationship with the market share which indicates the competitiveness. Downward trend of market share reveals that Sri Lankan tea loses its market share during forecasted 25 years. Furthermore productivity decreases, cost of production increases and Colombo auction price increases within next 25 years. Therefore, it is necessary to take measures to overcome high cost of production, low productivity and to maintain favourable prices of Sri Lankan teas.

Reference

Ali, R., Choudhry, Y.A., Lister, D.W., 1997. Sri Lanka tea industry: Succeeding in the global markets. World Bank Discussion Paper No. 368. The World Bank, Washinton D.C.