

## IMPACT OF RISING ELECTRICITY COST AND ELECTRICITY PRODUCTIVITY ON PROFIT MARGINS OF SRI LANKAN MANUFACTURING FIRMS

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## **EXECUTIVE SUMMARY**

The rapid rise in electricity cost in recent years had added significantly to the cost of Sri Lankan made products and made it more difficult for Sri Lankan firms to compete with countries with lower electricity cost. Alternatively firms had to sacrifice their profit margins to maintain their competitiveness. The transition from hydro electricity to thermal electricity has been the root cause of the rapid tariff increases in the last two decades. Though electricity may account less than 10 percent of the product sales value in many firms, it is an area that can be greatly improved upon for helping firms to contain escalating energy costs, maintain financial viability and gain marketing edge on their competitors.

This study presents an empirical analysis on impact of rising electricity cost on profit margins of Sri Lankan Manufacturing firms. Further the study explores the extent of electricity productivity improvements undertaken by firms to reduce the effects of rising energy cost. The questionnaire was used to collect data from a sample of 62 manufacturing firms in Sri Lanka.

The first part of the research is for studying the impact of electricity cost increase over the last 9 years. The study finds that the impact on profit margin increases as the increased electricity cost of the manufacturing firms increases. The electricity productivity levels of manufacturing firms are at lower levels when compared to the best achievable levels. It was found that the electricity productivity improvement in firms which has undertaken value chain analysis is more effective. Further, it reveals that effect on profit margin has been higher in High Electricity Productivity (HEP) firms than that in Low Electricity Productivity (LEP) firms. In other words the effect on profit margin is high when firms are operating in highly competitive markets. Therefore they have taken action to improve the electricity productivity to reduce the effect on profit margin. A reduction in market share of LEP firms is higher than that in HEP firms. LEP firms feel relatively low pressure from market completion and therefore they can transfer the more of the increased cost to the product price. This may have resulted in reduction in market share.

The second part of the research is for studying how the electricity cost increase at the last tariff revision in November 2008 was handled by manufacturing firms. When the increase is relatively low, both HEP firms and LEP firms absorbed 50% to 75% in the profit margin. However as the electricity cost increase of a firm increases, HEP firms have absorbed the more of the increased electricity cost into the profit margin while LEP firms have transferred more of the increased electricity cost to the product price. The correlation between effect on profit margin and electricity productivity is moderate positive for HEP firms while almost no correlation for LEP firms.

According to the results of the survey 87% of firms agree that the effect of rising electricity cost can be reduced though Electricity productivity improvements. But it appears that the lack of funds and non conducive organizational culture acts as main barriers for electricity productivity improvements in Sri Lankan manufacturing firms.